

FIG. 1A
PRIOR ART

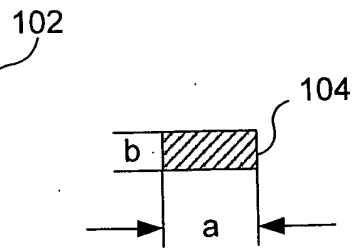


FIG. 1B
PRIOR ART

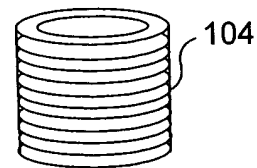


FIG. 1C
PRIOR ART

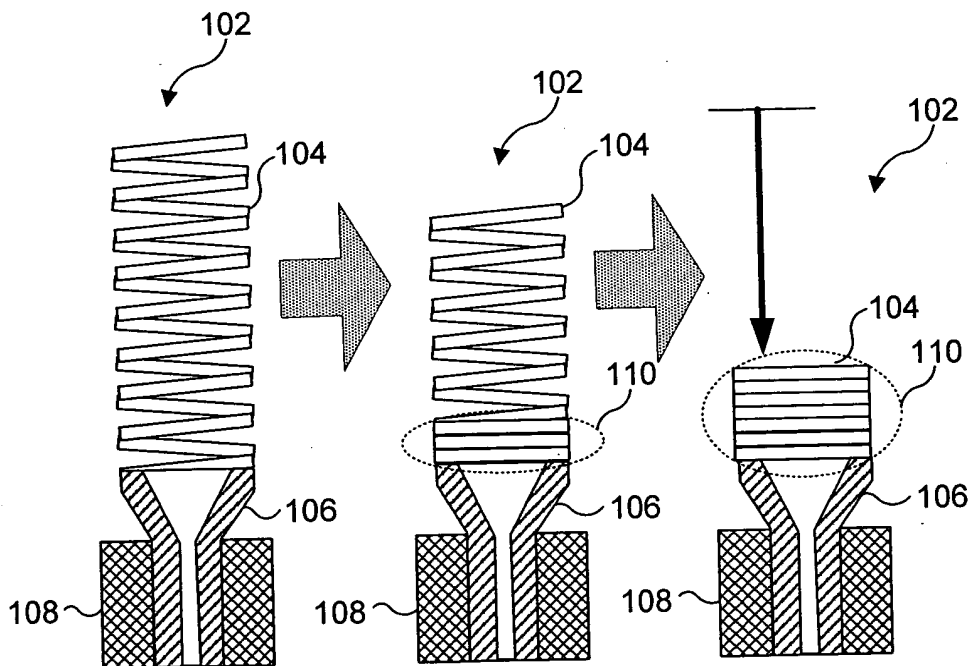


FIG. 2A

FIG. 2B

FIG. 2C

PRIOR ART

BEST AVAILABLE COPY

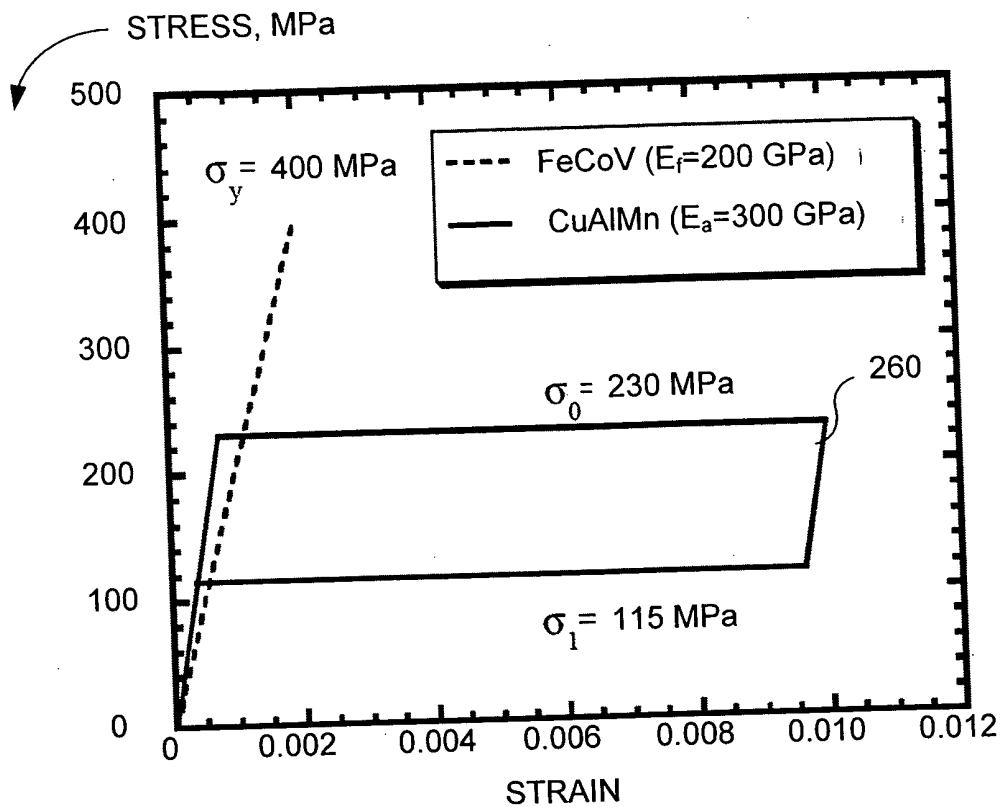


FIG. 3

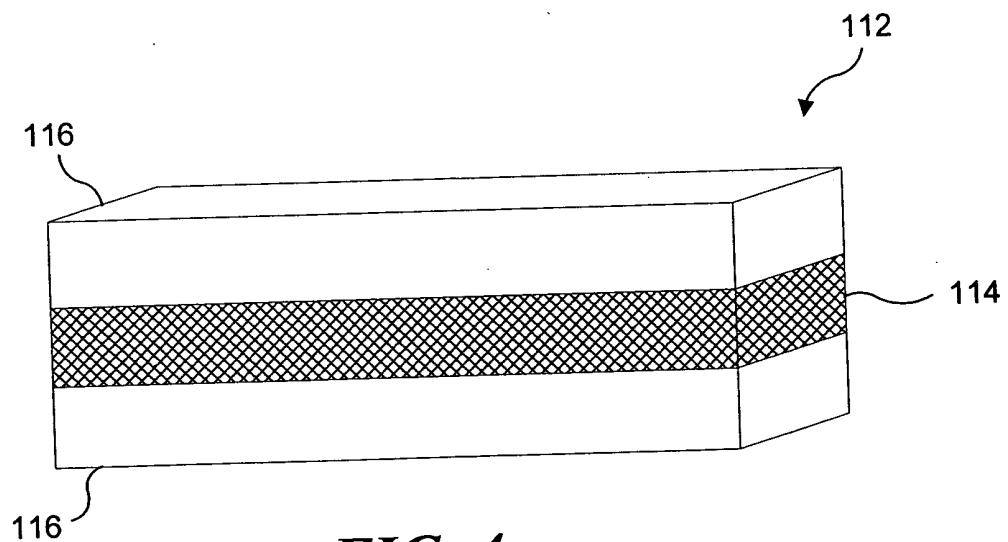


FIG. 4
PRIOR ART

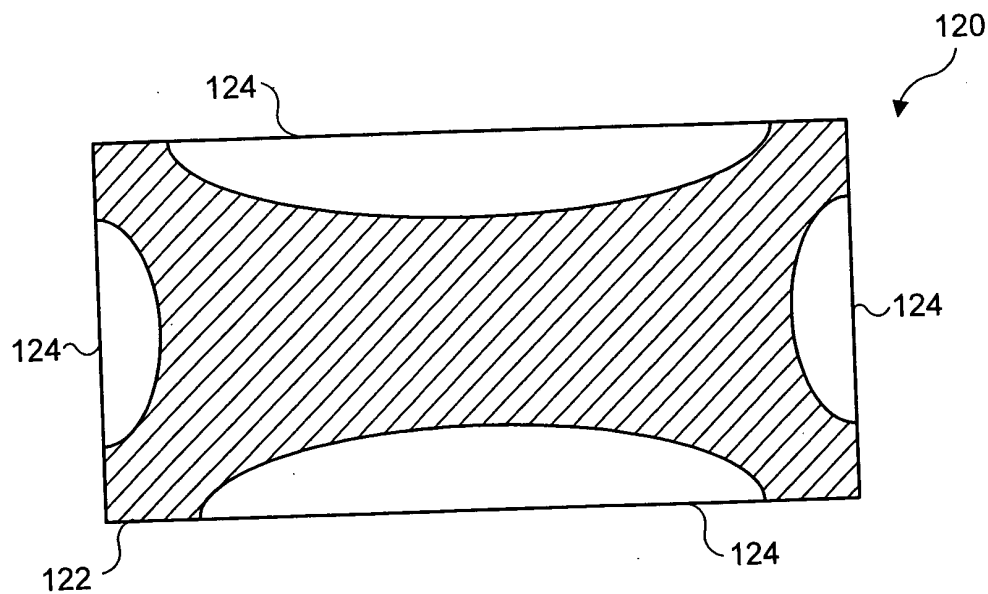


FIG. 5

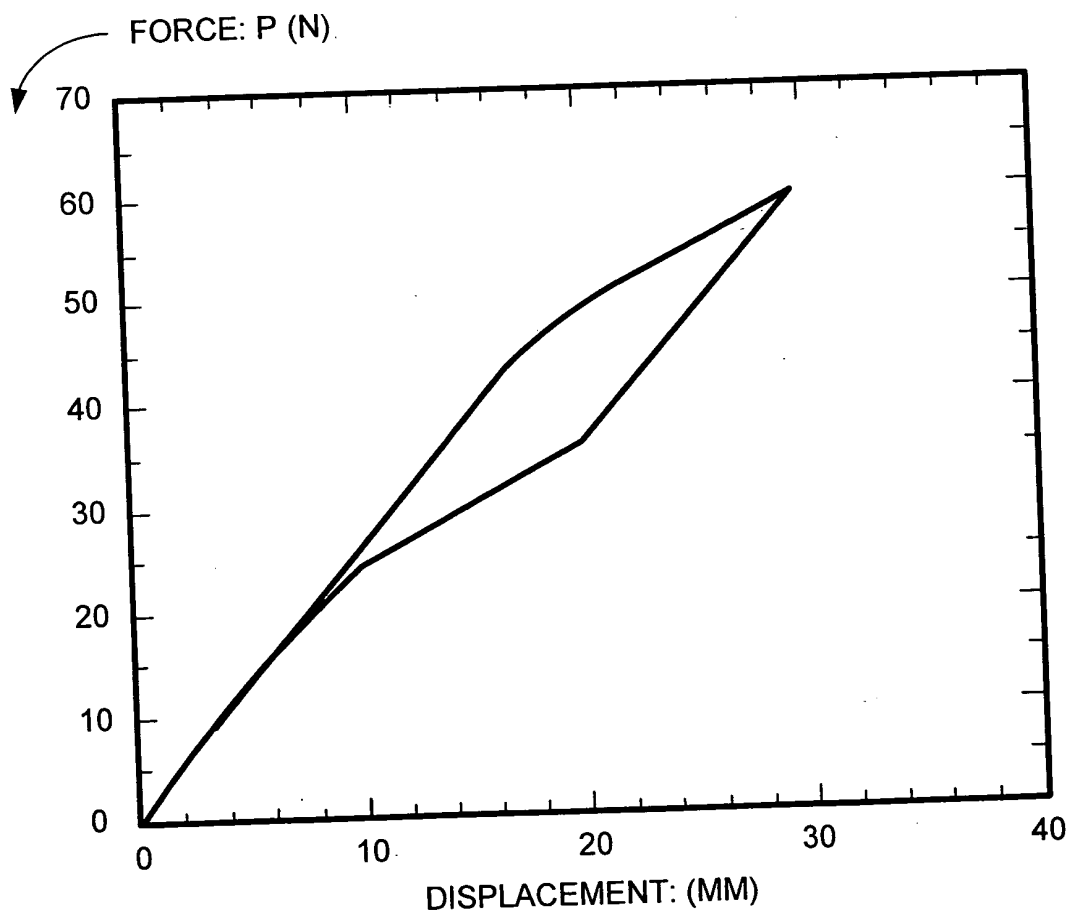
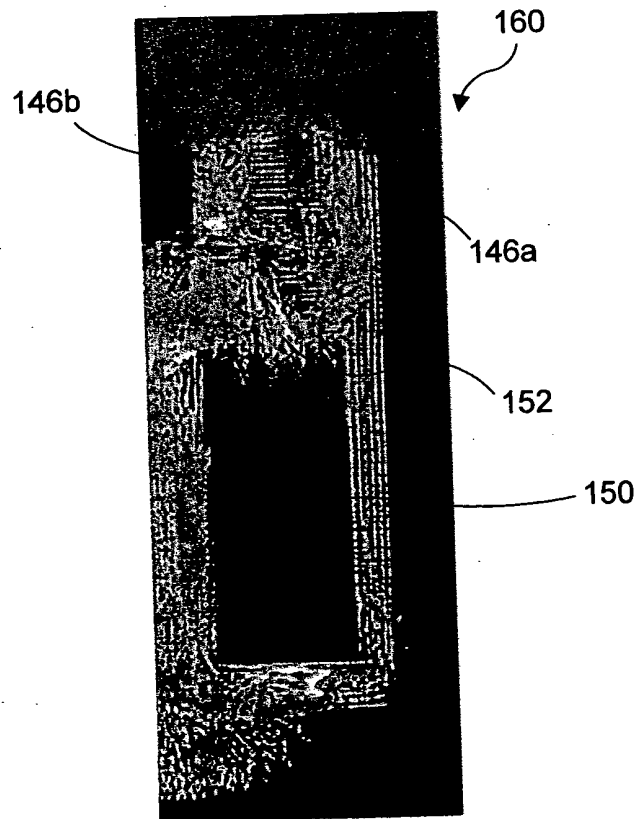
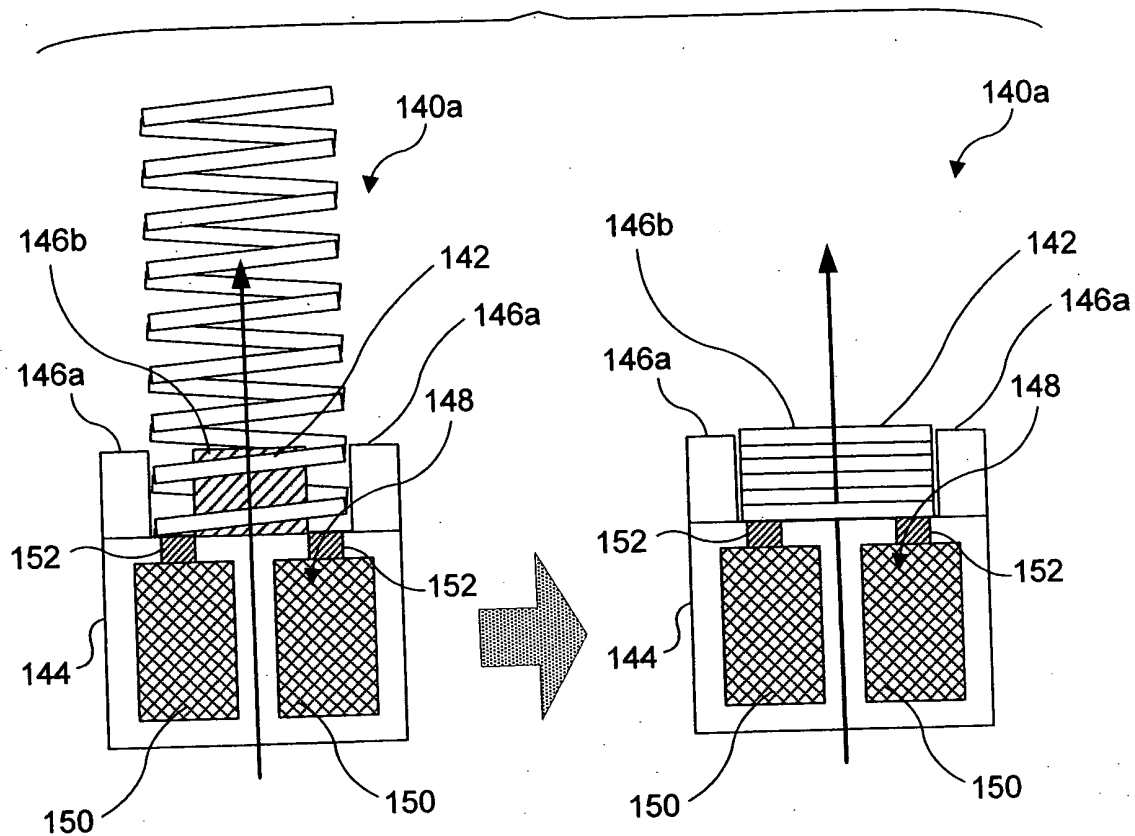


FIG. 6

FIG. 7**FIG. 8**

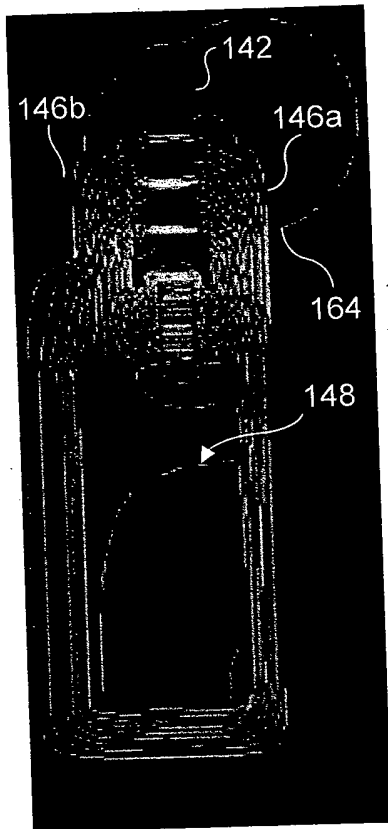


FIG. 9A

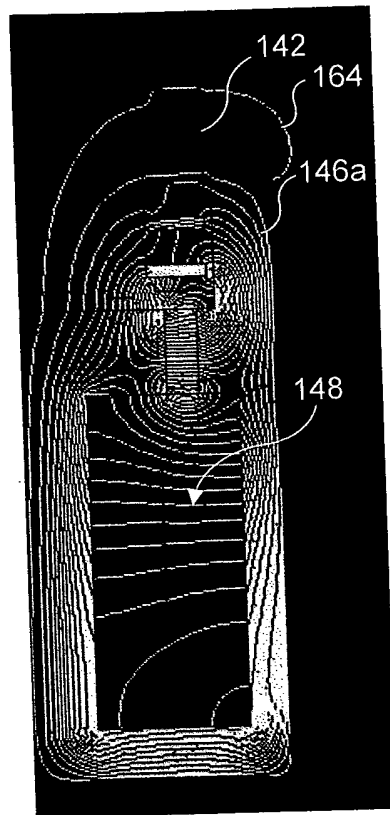


FIG. 9B

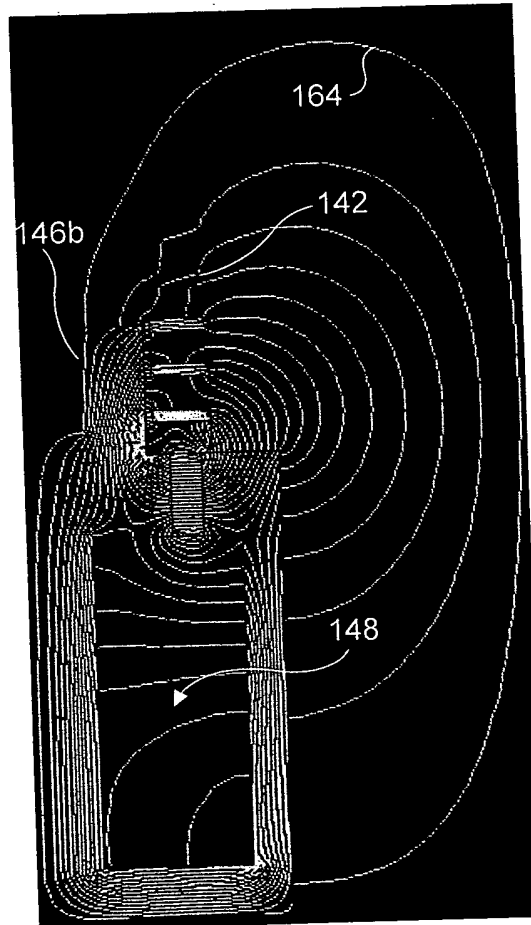


FIG. 9C

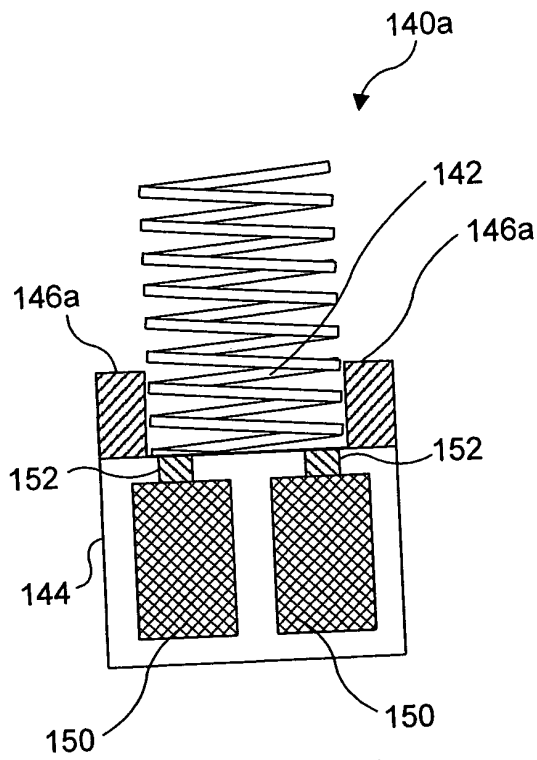


FIG. 10A

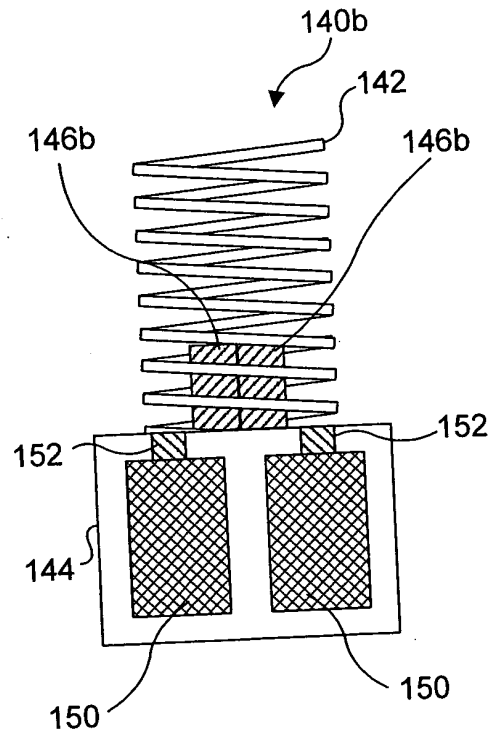


FIG. 10B

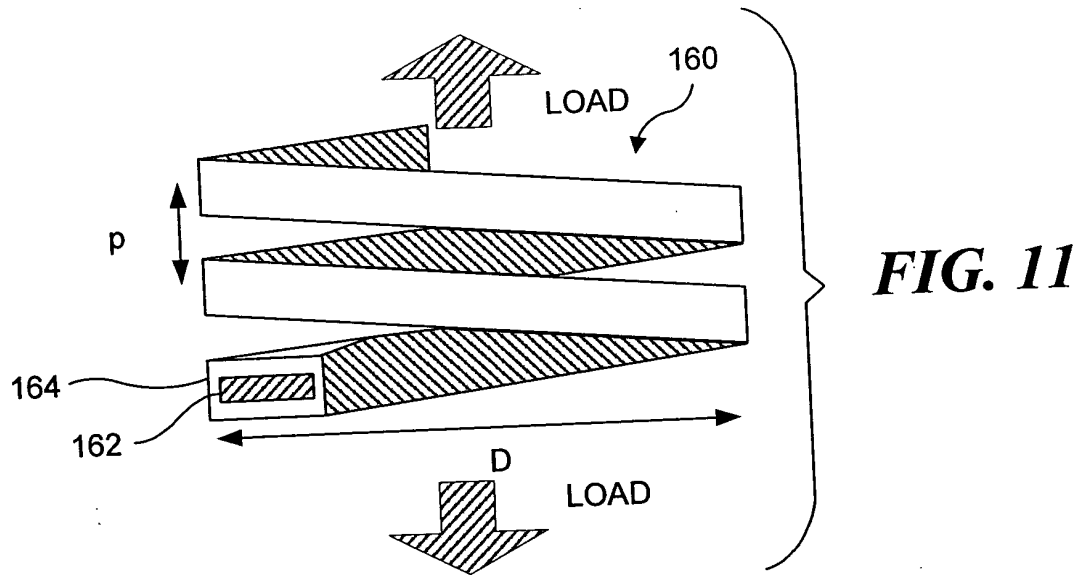


FIG. 11

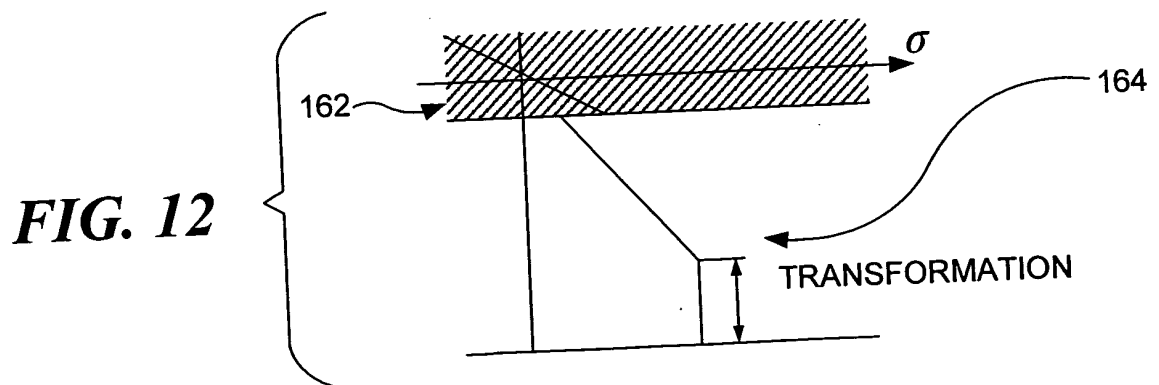


FIG. 12

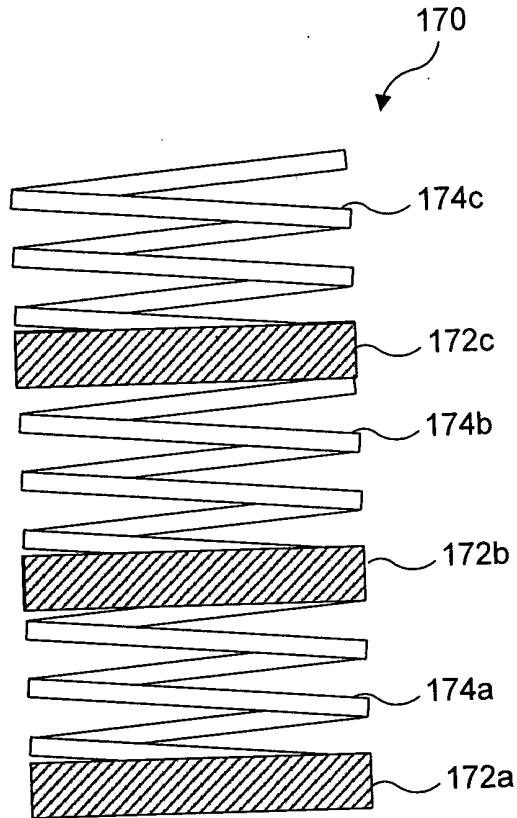


FIG. 13A

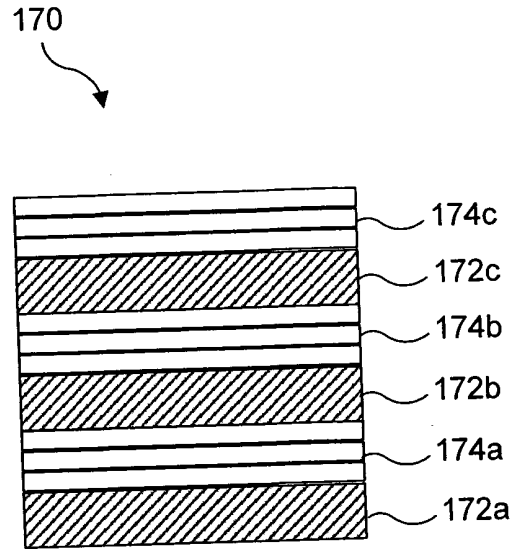


FIG. 13B

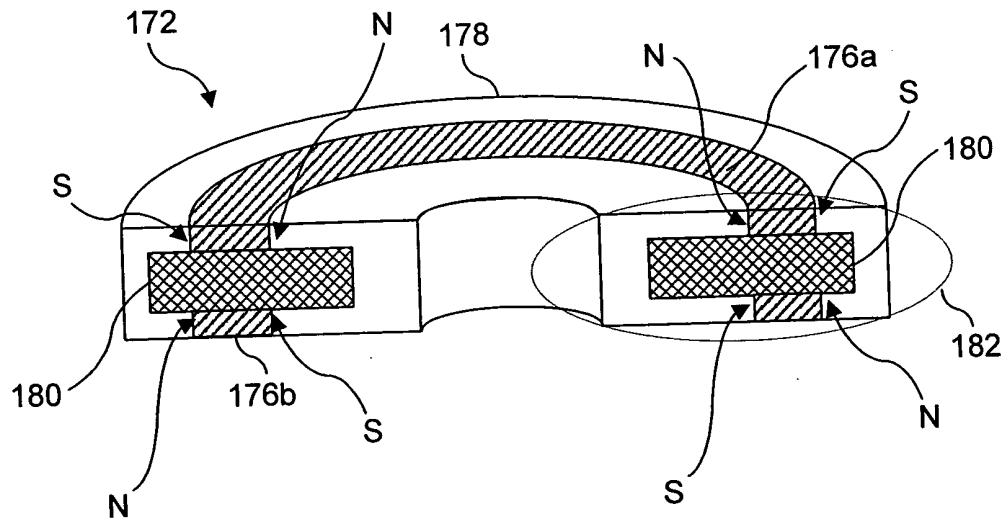


FIG. 14

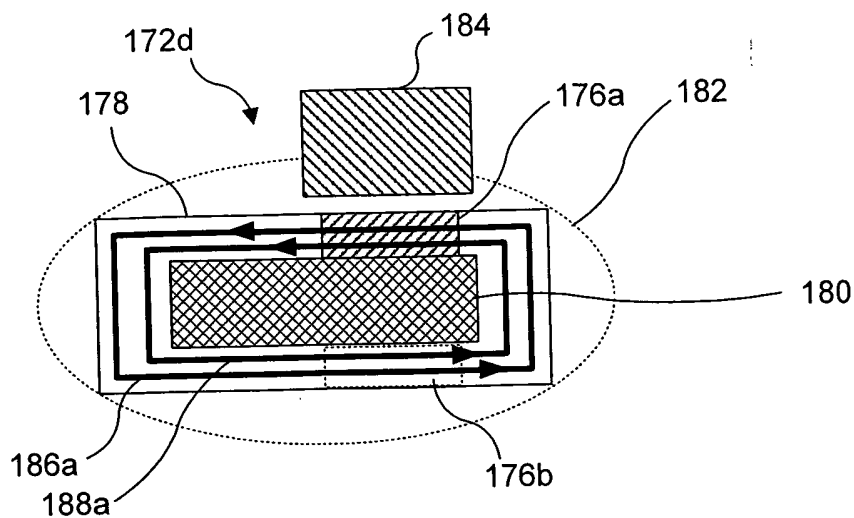


FIG. 15A

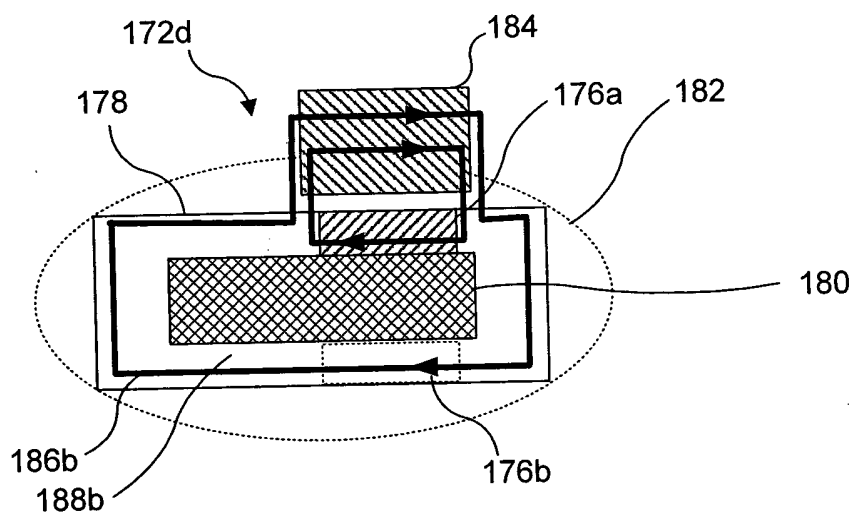


FIG. 15B

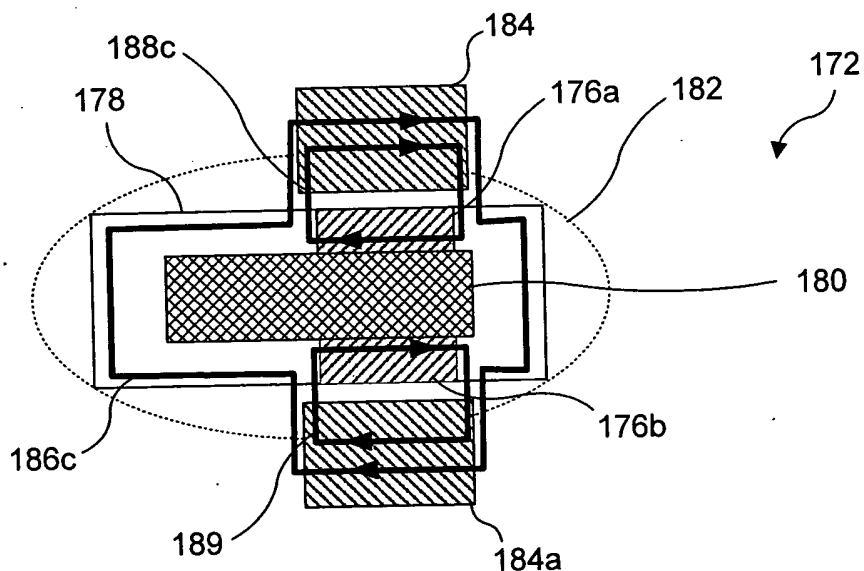


FIG. 15C

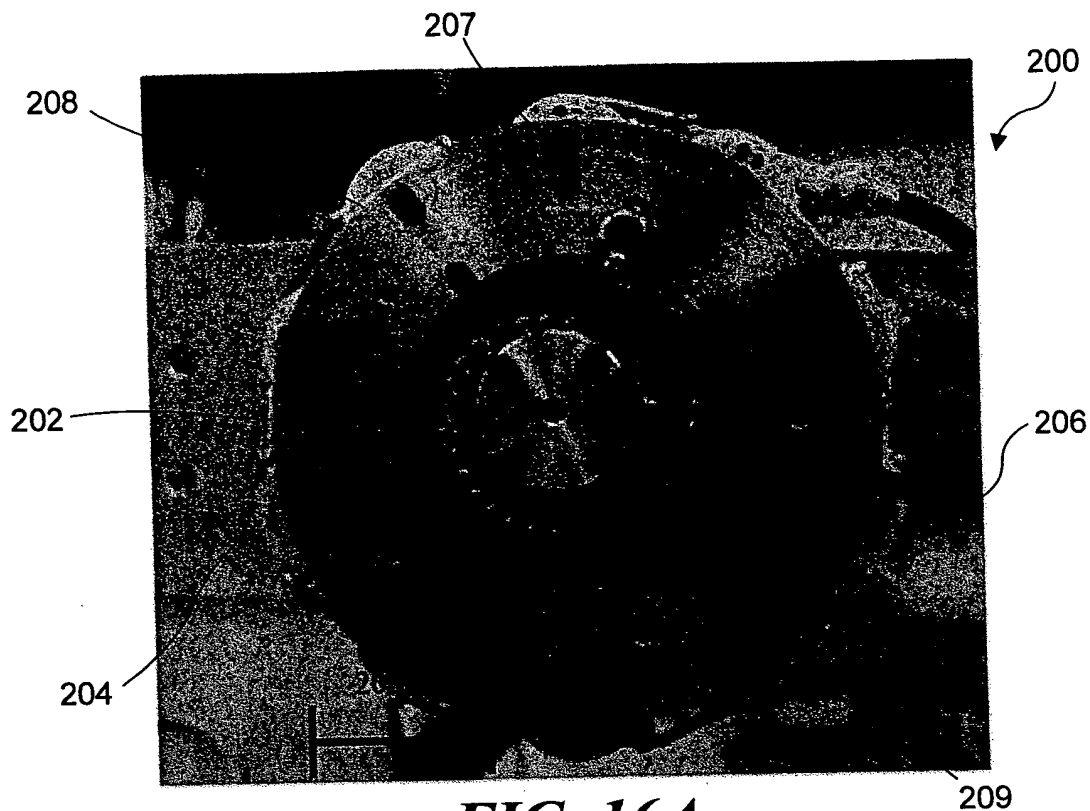


FIG. 16A

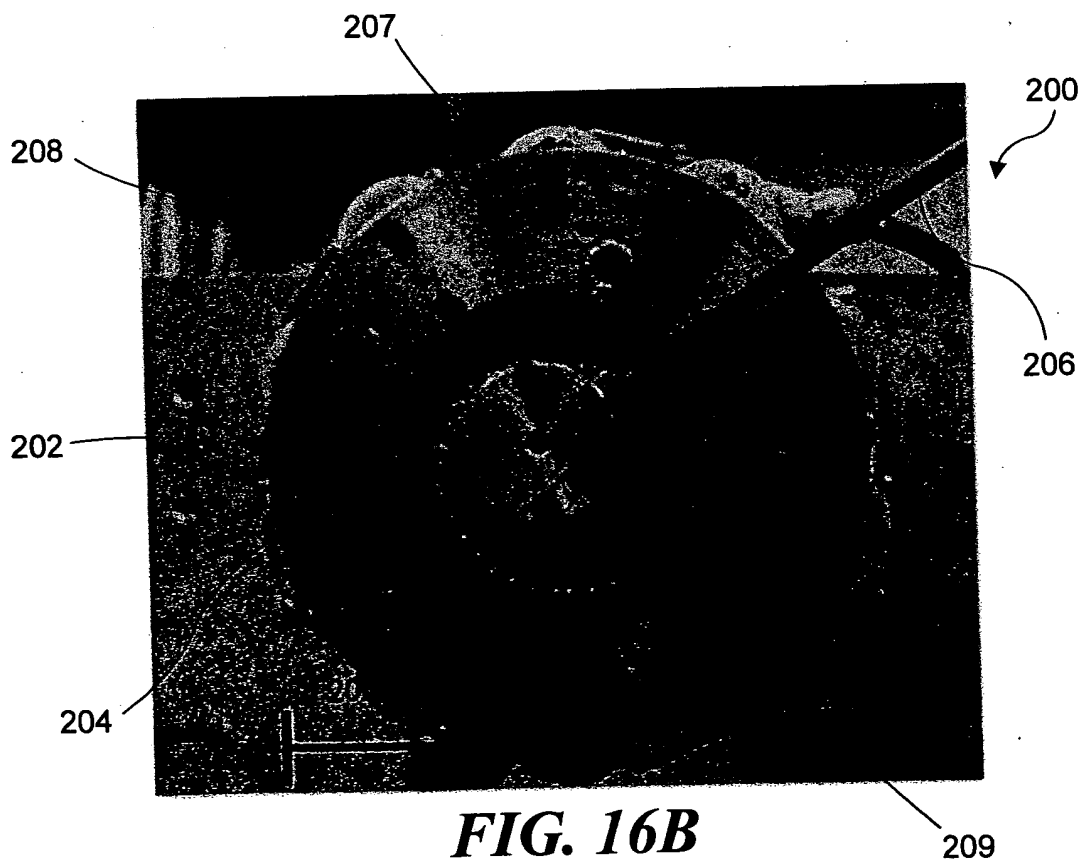


FIG. 16B

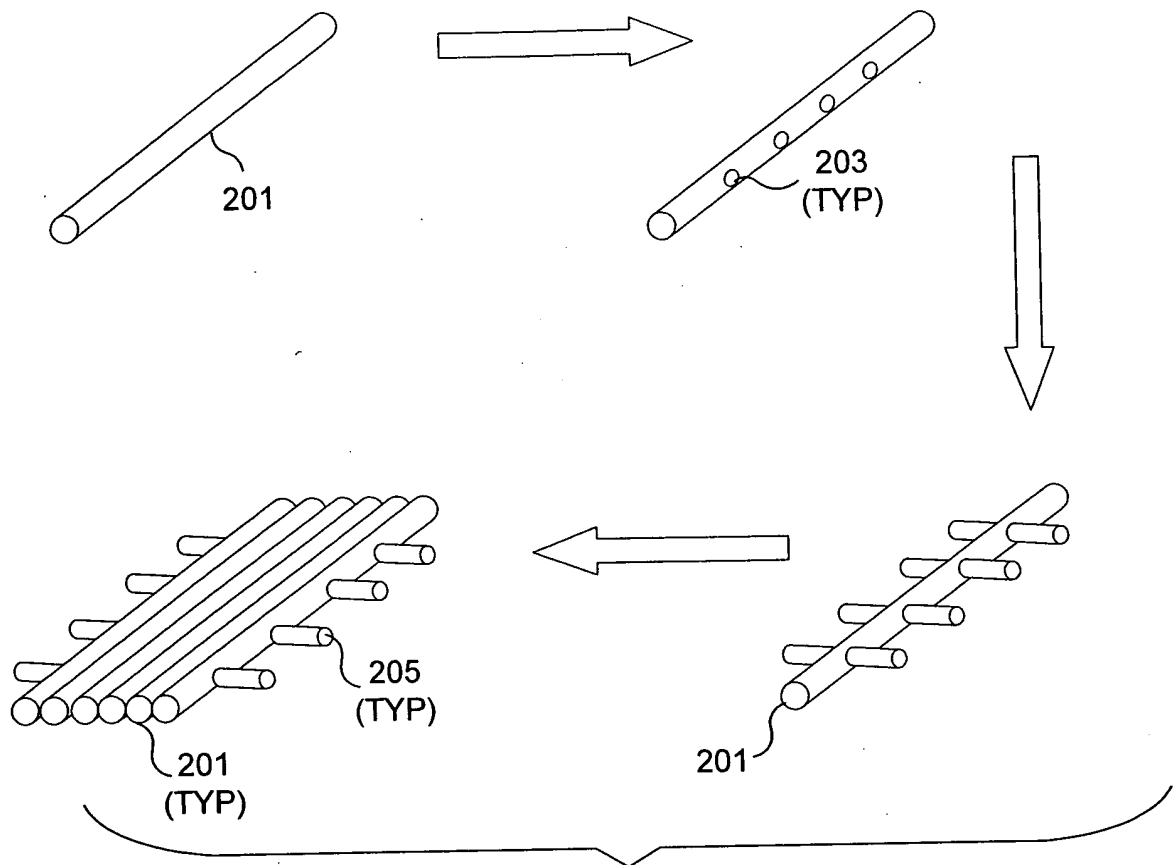


FIG. 16C

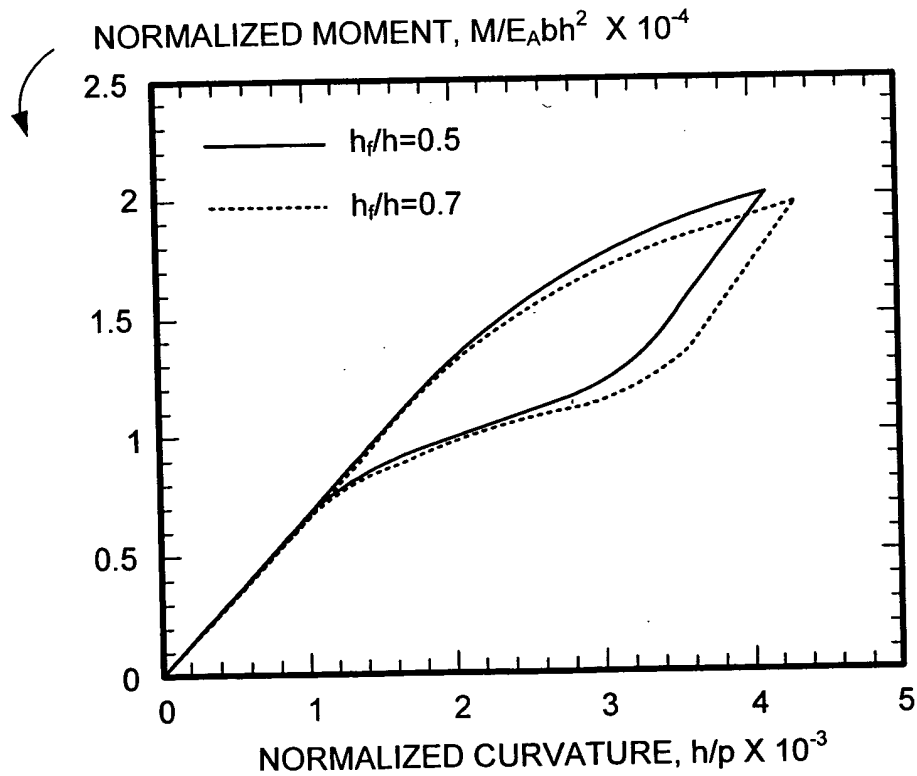


FIG. 24

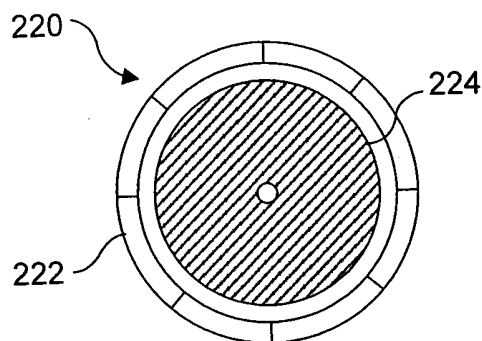


FIG. 17A
PRIOR ART

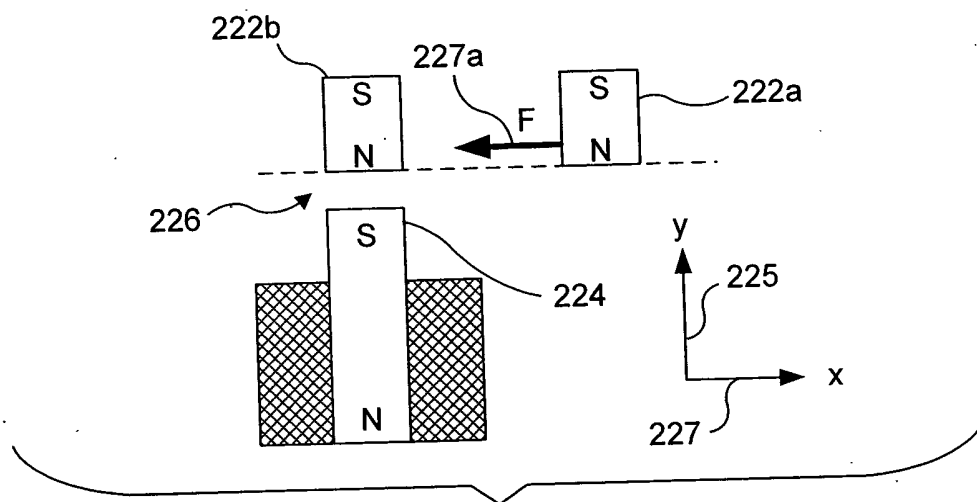
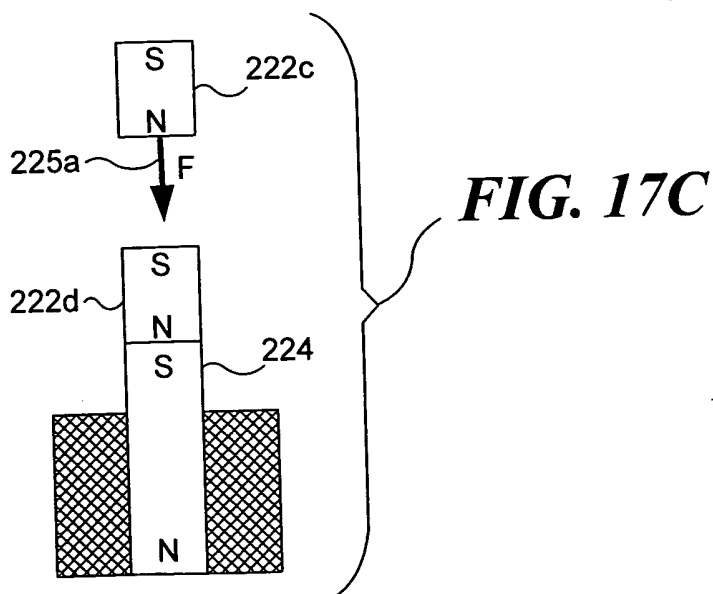


FIG. 17B PRIOR ART



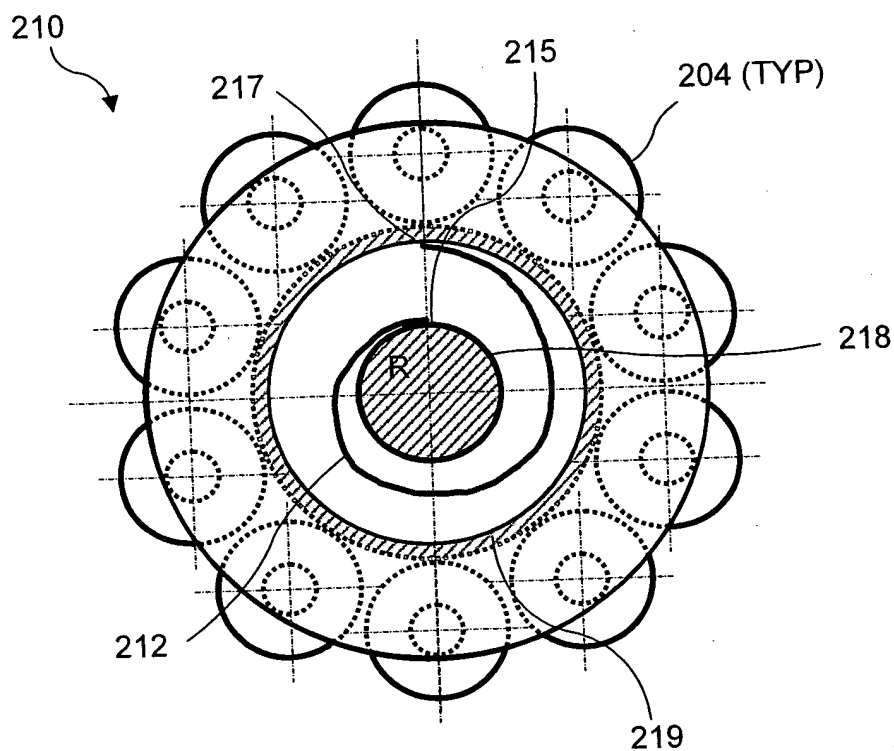


FIG. 18A

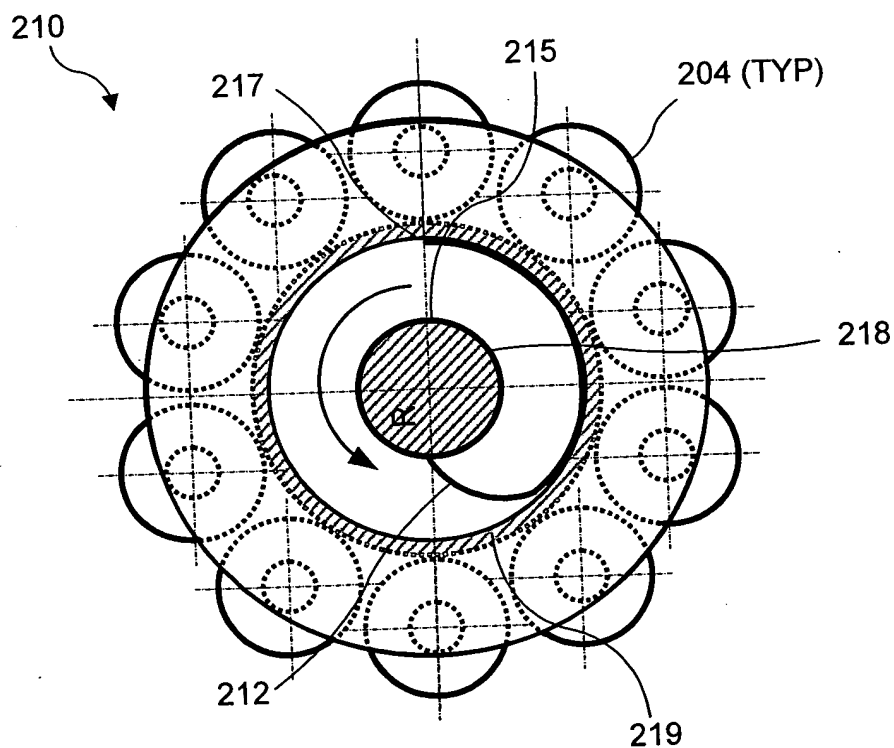


FIG. 18B

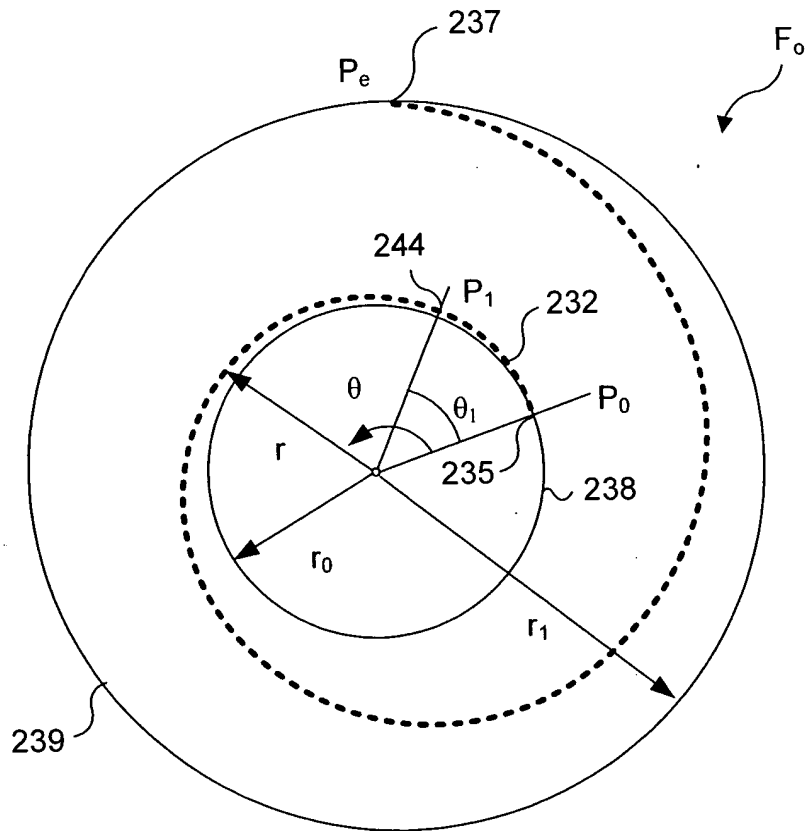


FIG. 19A

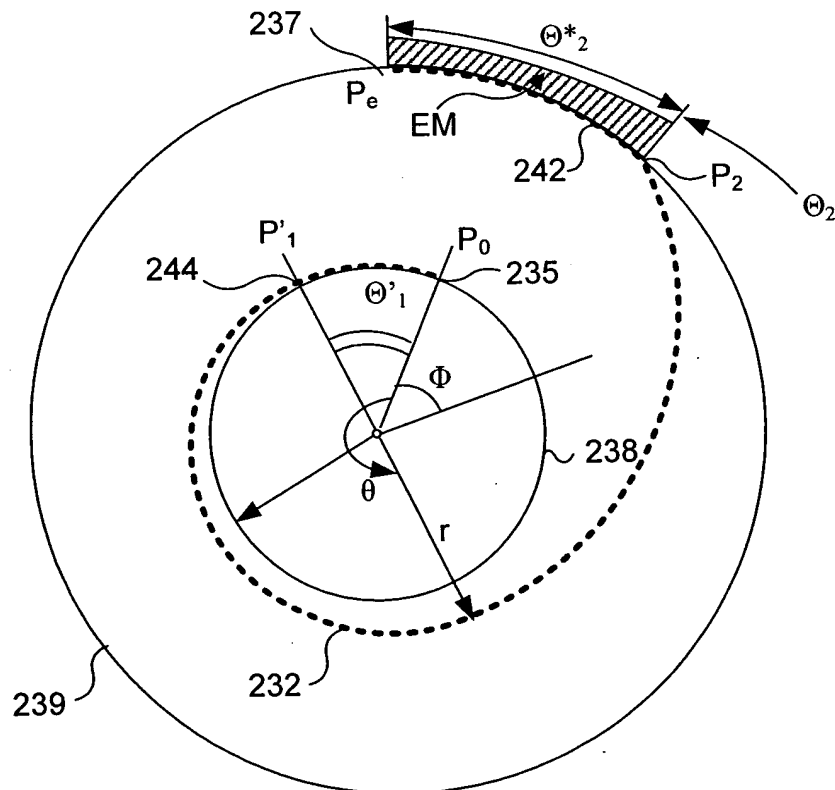


FIG. 19B

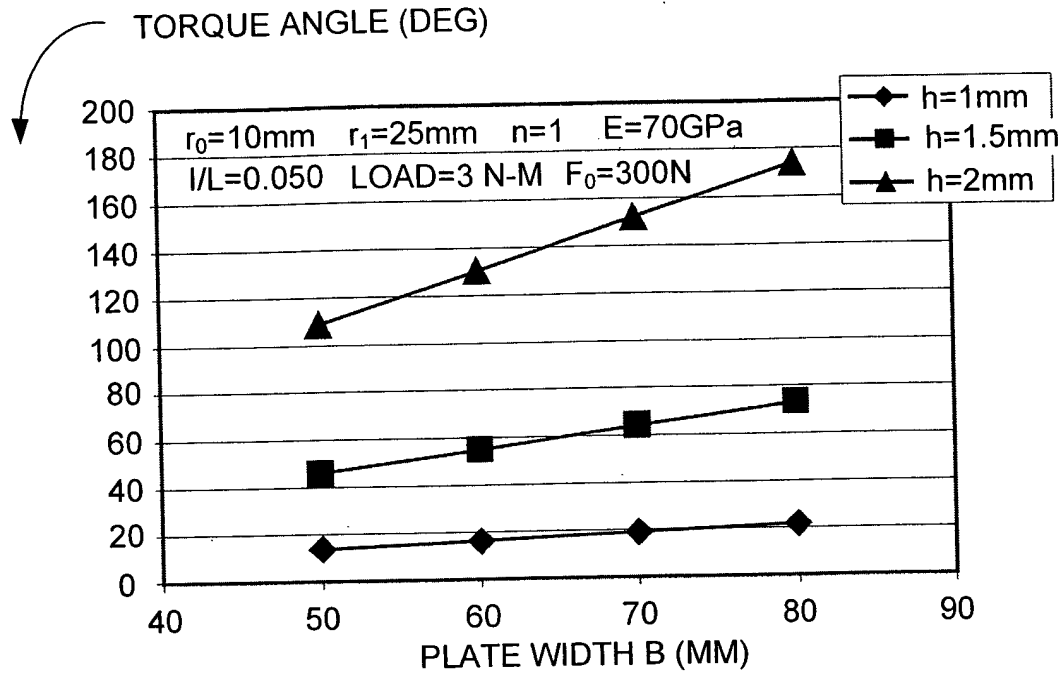


FIG. 20

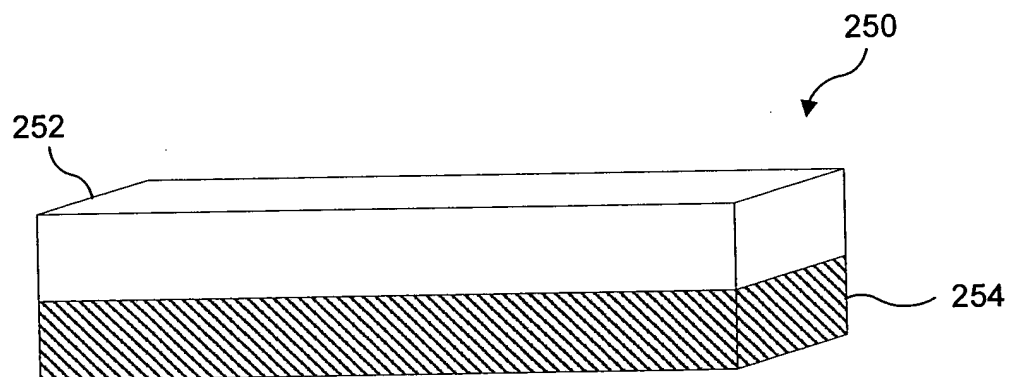


FIG. 21

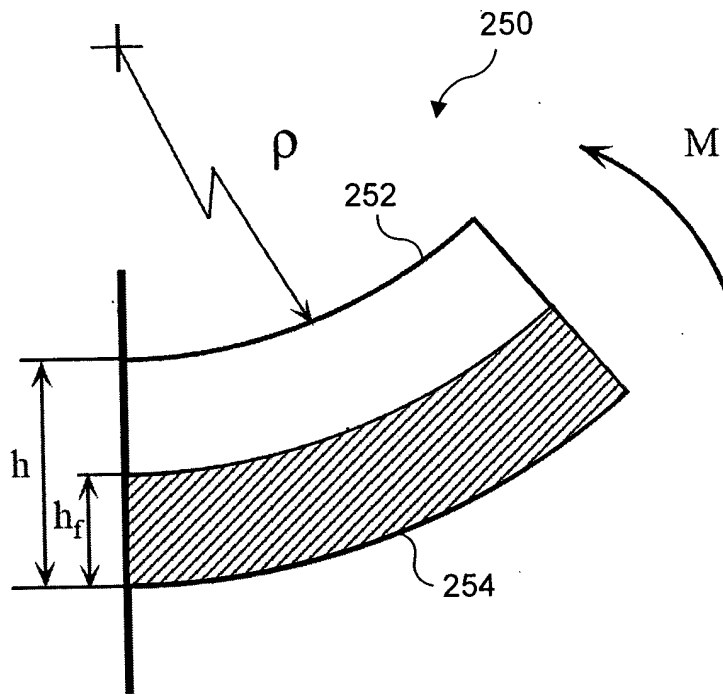


FIG. 22

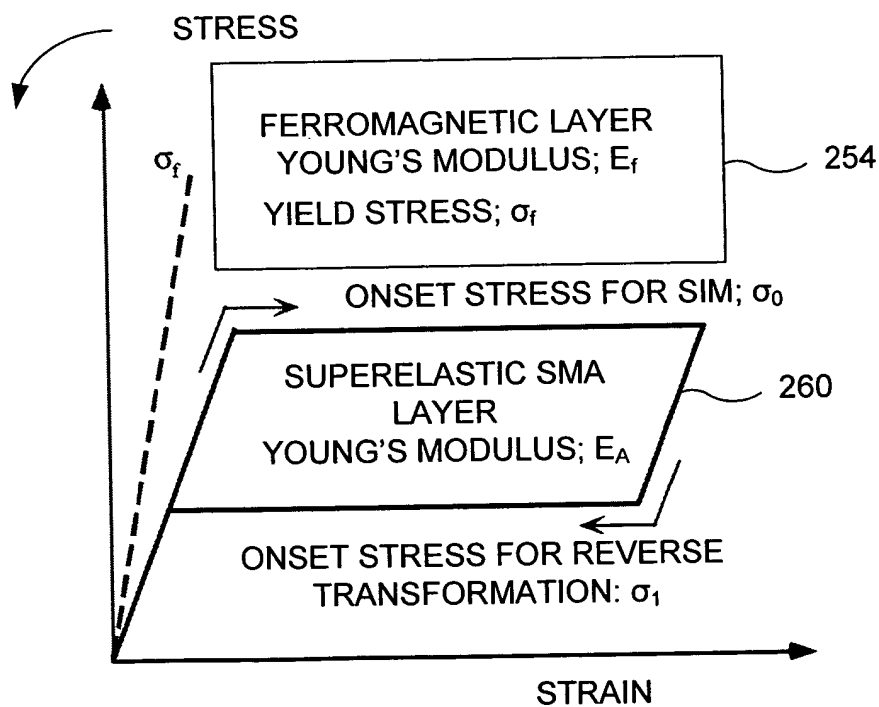


FIG. 23

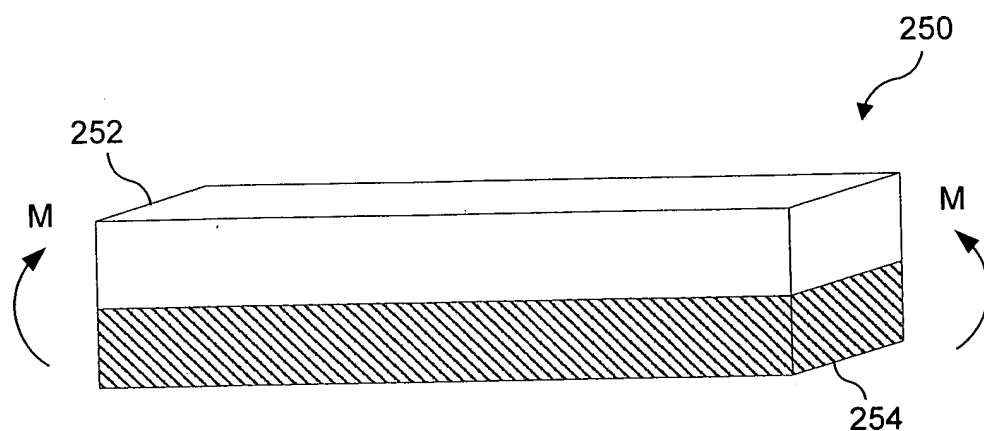


FIG. 25A

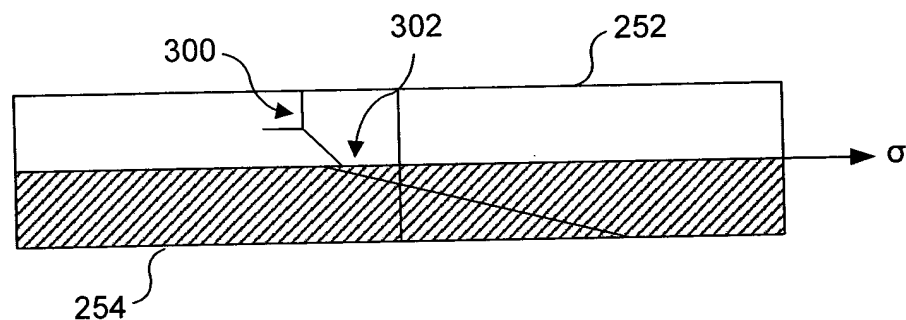


FIG. 25B

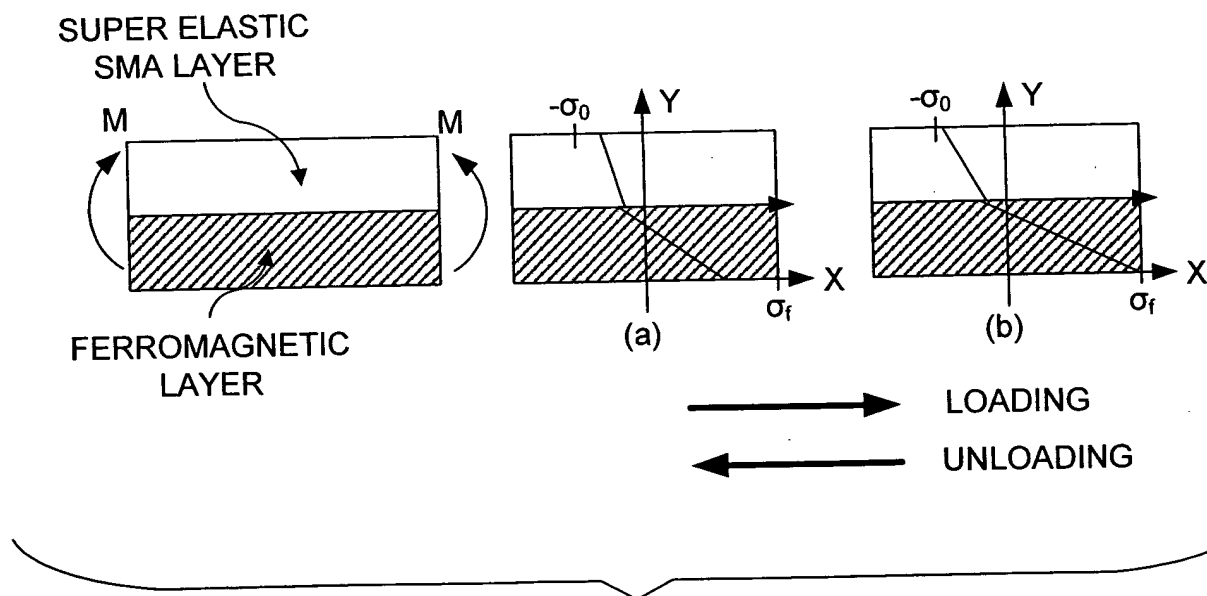


FIG. 26A

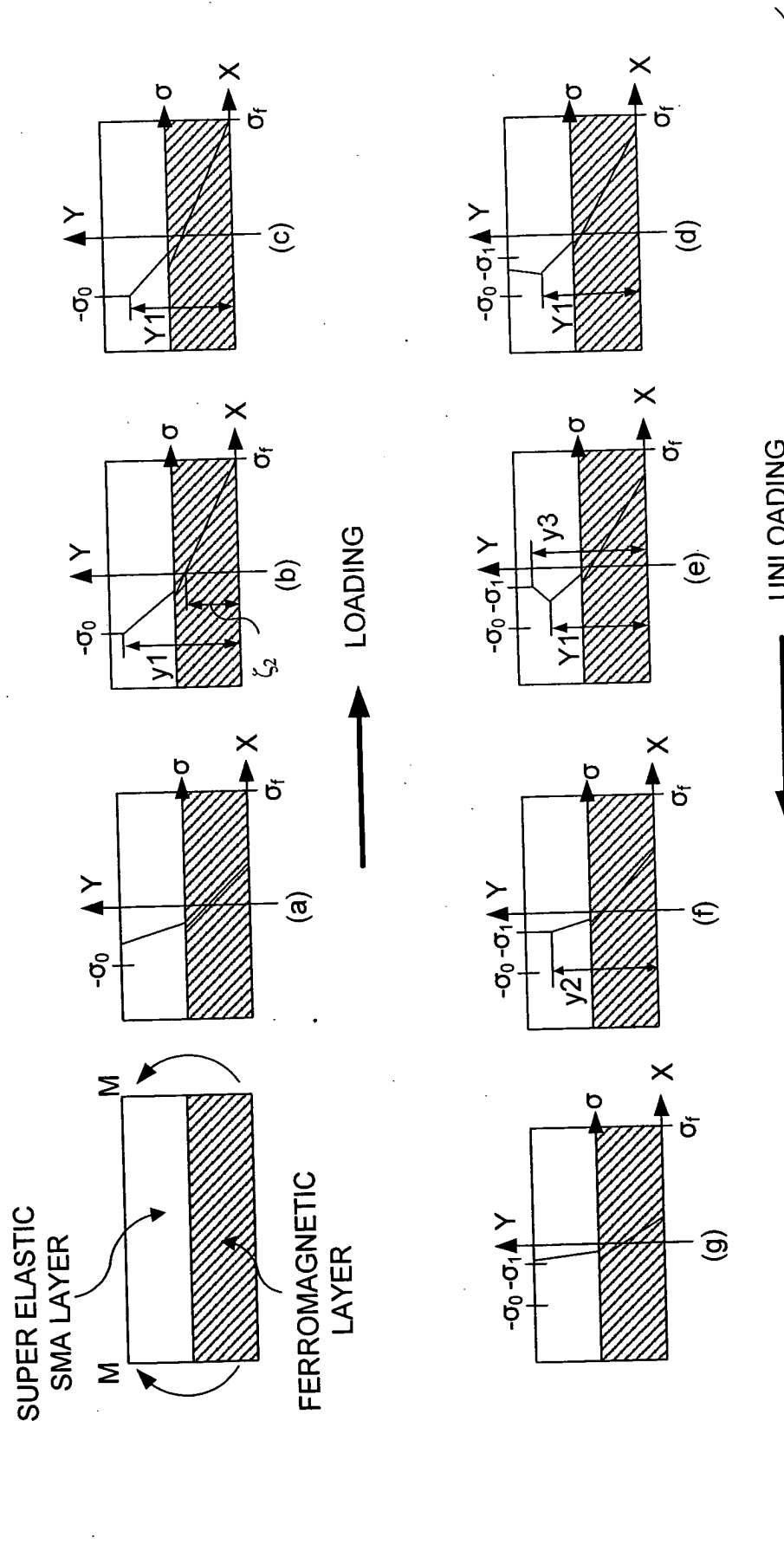


FIG. 26B

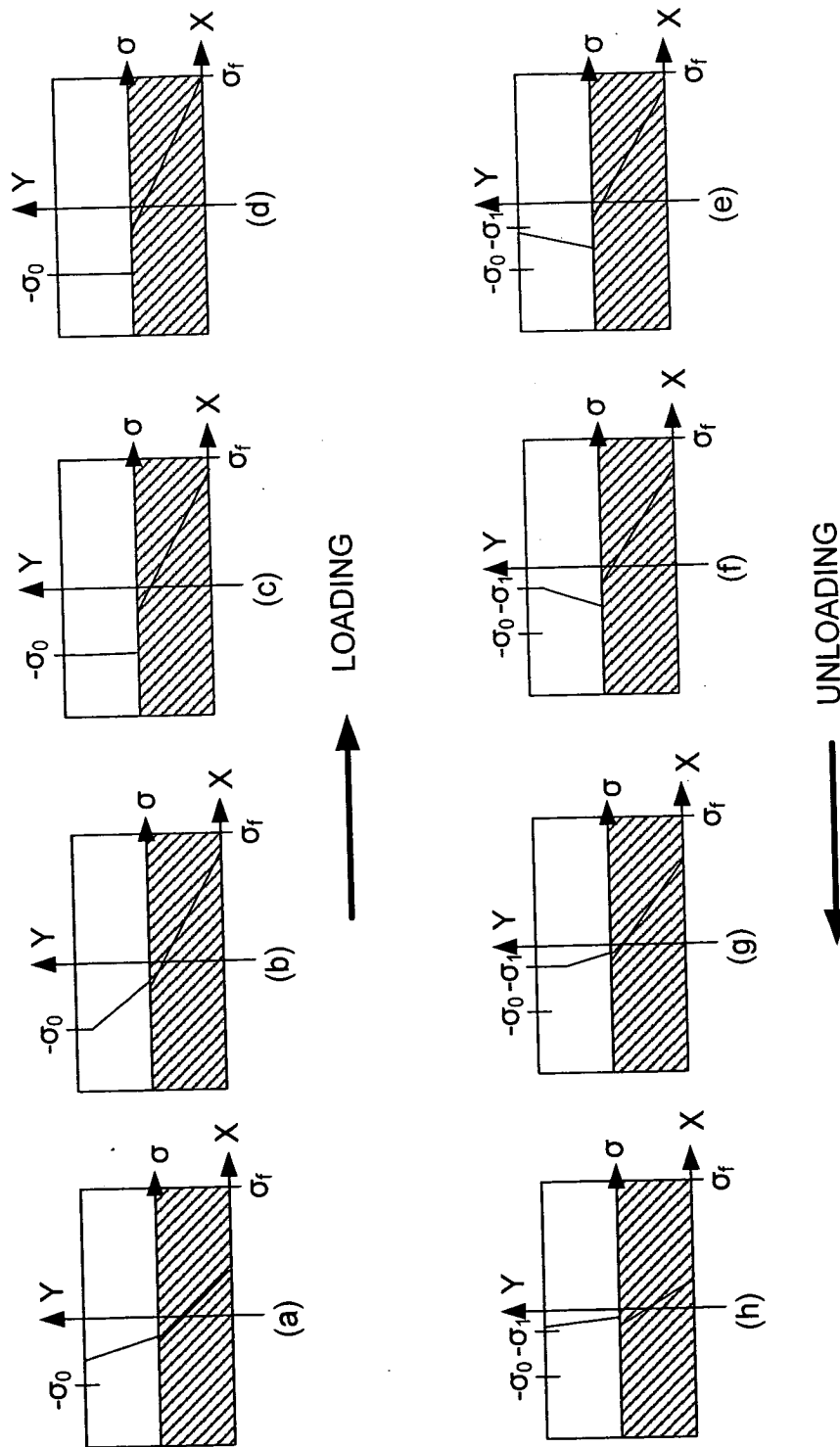


FIG. 26C

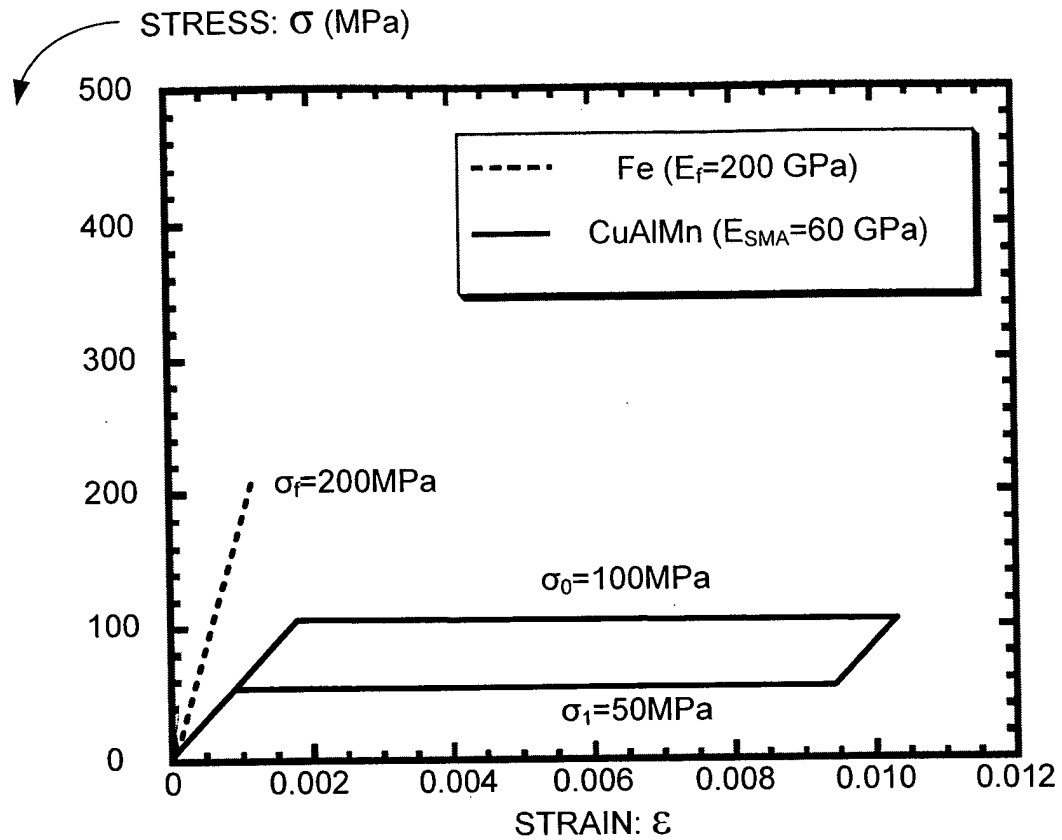


FIG. 27

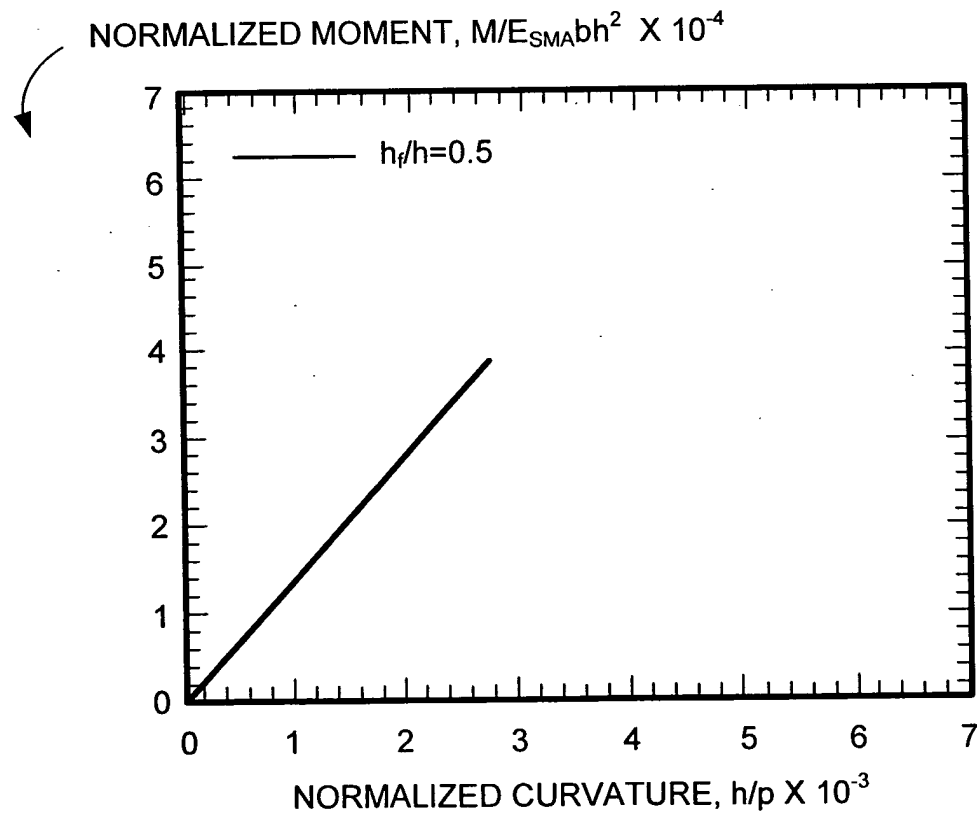


FIG. 28

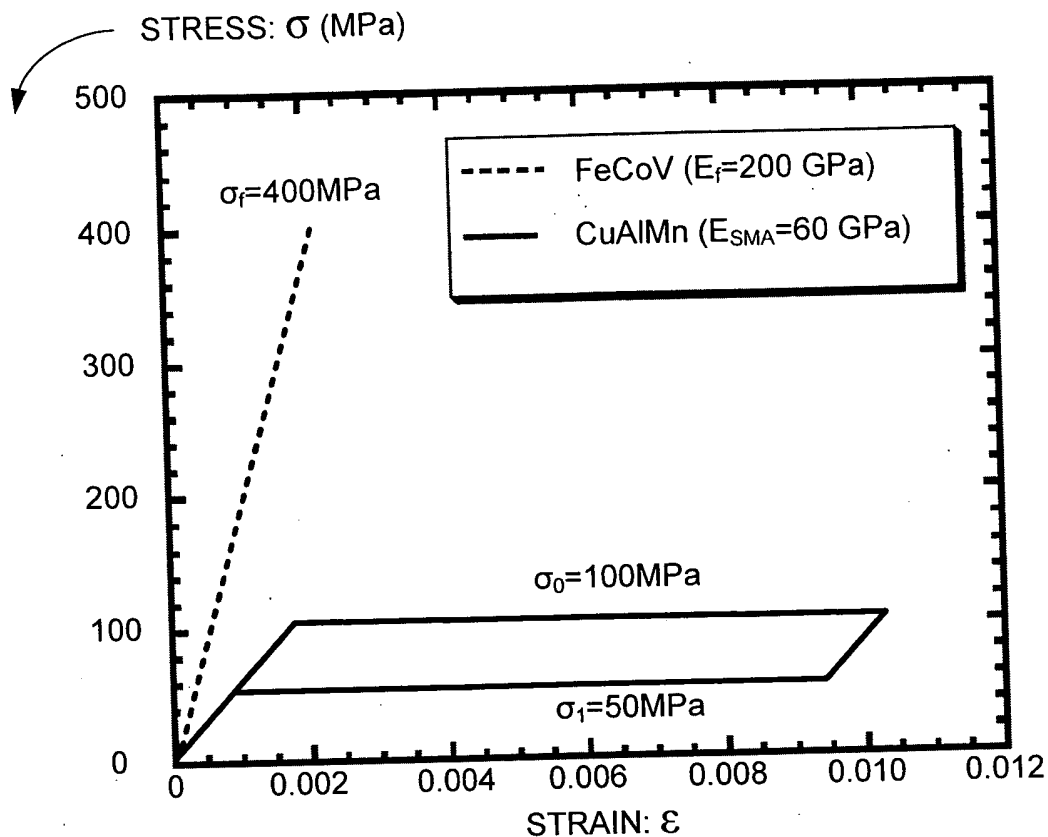


FIG. 29

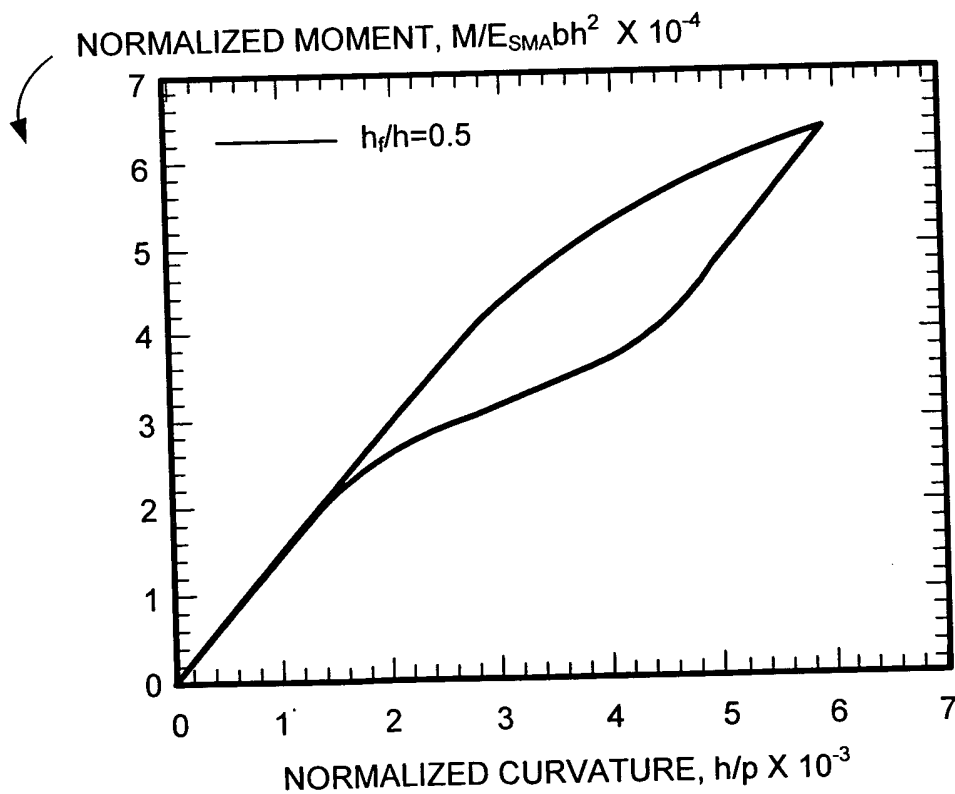


FIG. 30

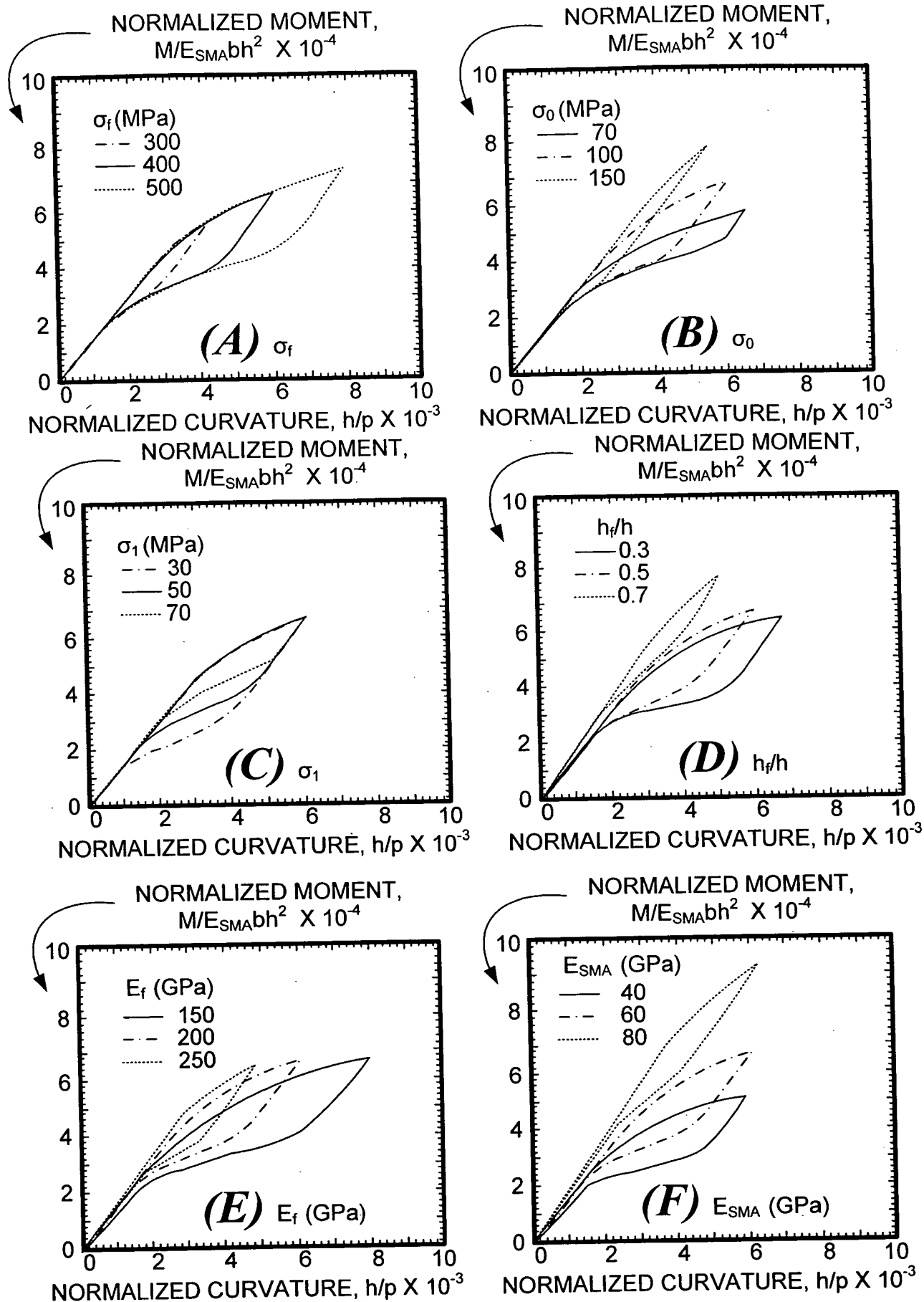
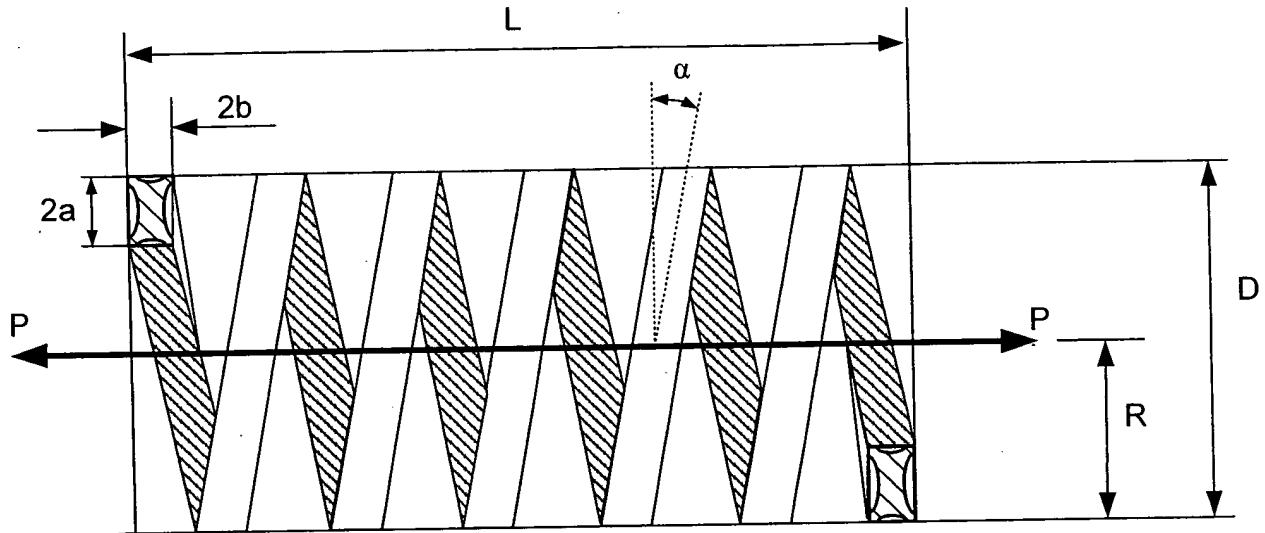


FIG. 31



D: THE DIAMETER OF THE SPRING ($D=2R$)
d: THE DIAMETER OF THE WIRE
p: THE PITCH OF ONE CYCLE
n: THE NUMBER OF TURNS
L: THE LENGTH OF THE SPRING W/O A LOAD ($L=np$)
 α : THE INCLINED ANGLE OF THE WIRE TO THE X-Y PLANE

FIG. 32

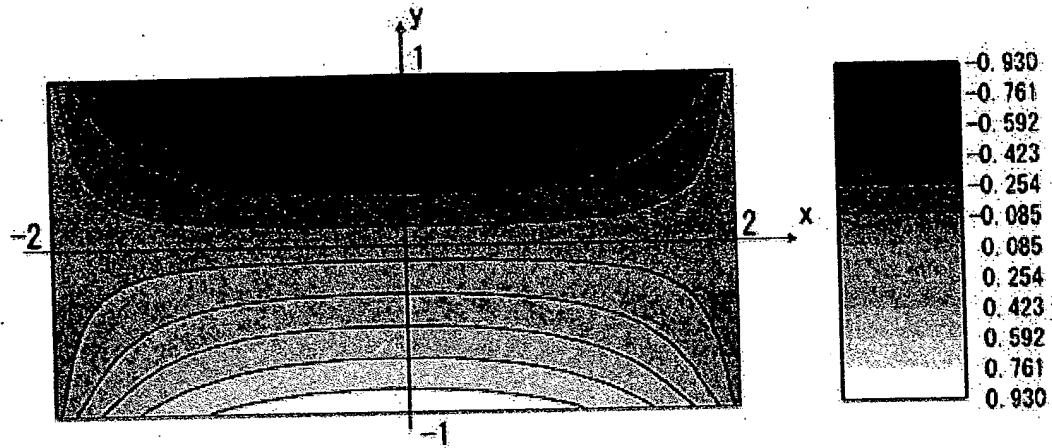


FIG. 33A

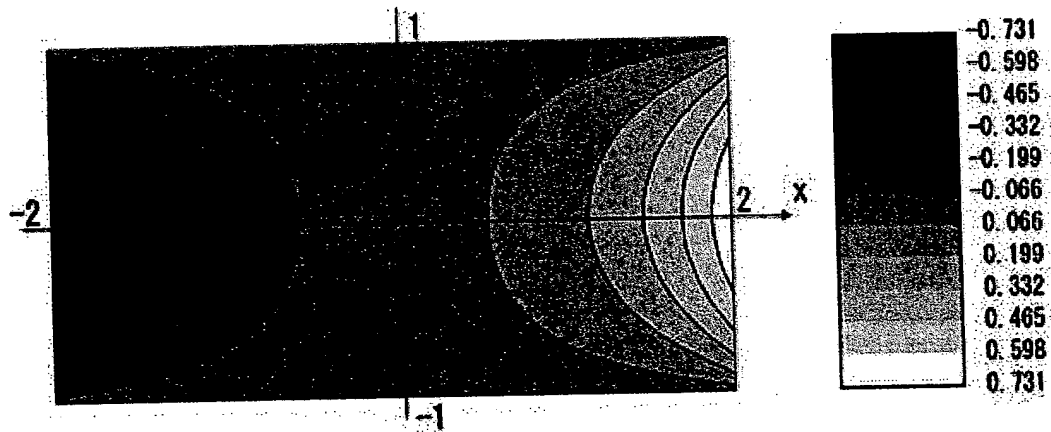


FIG. 33B

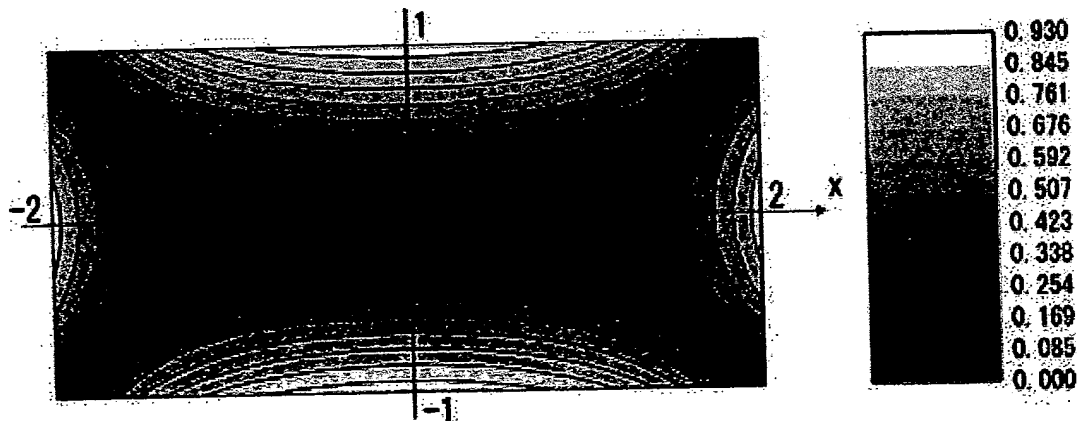


FIG. 33C

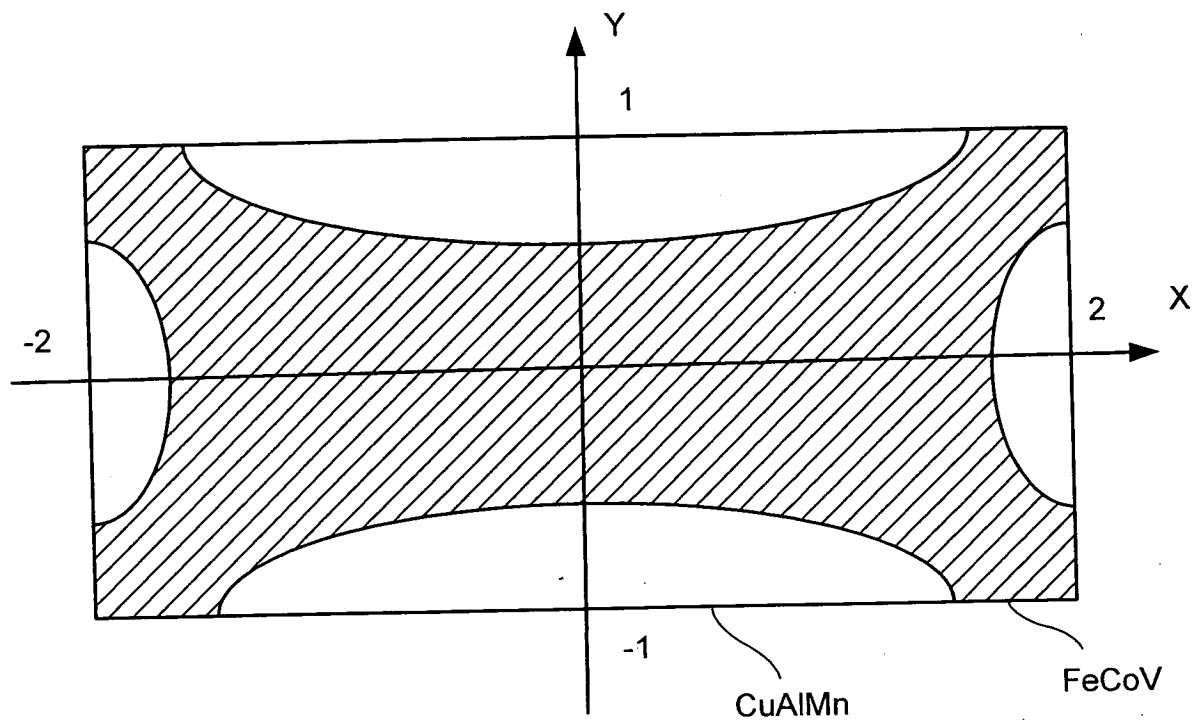


FIG. 34

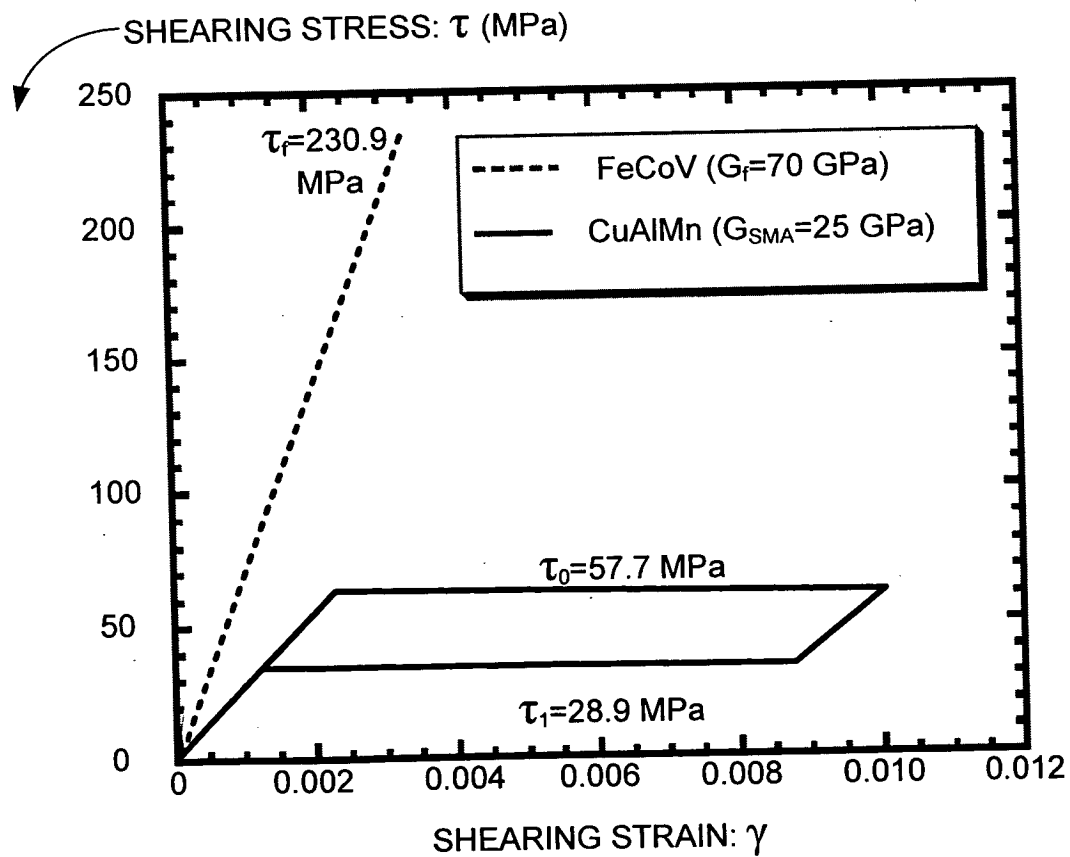


FIG. 35

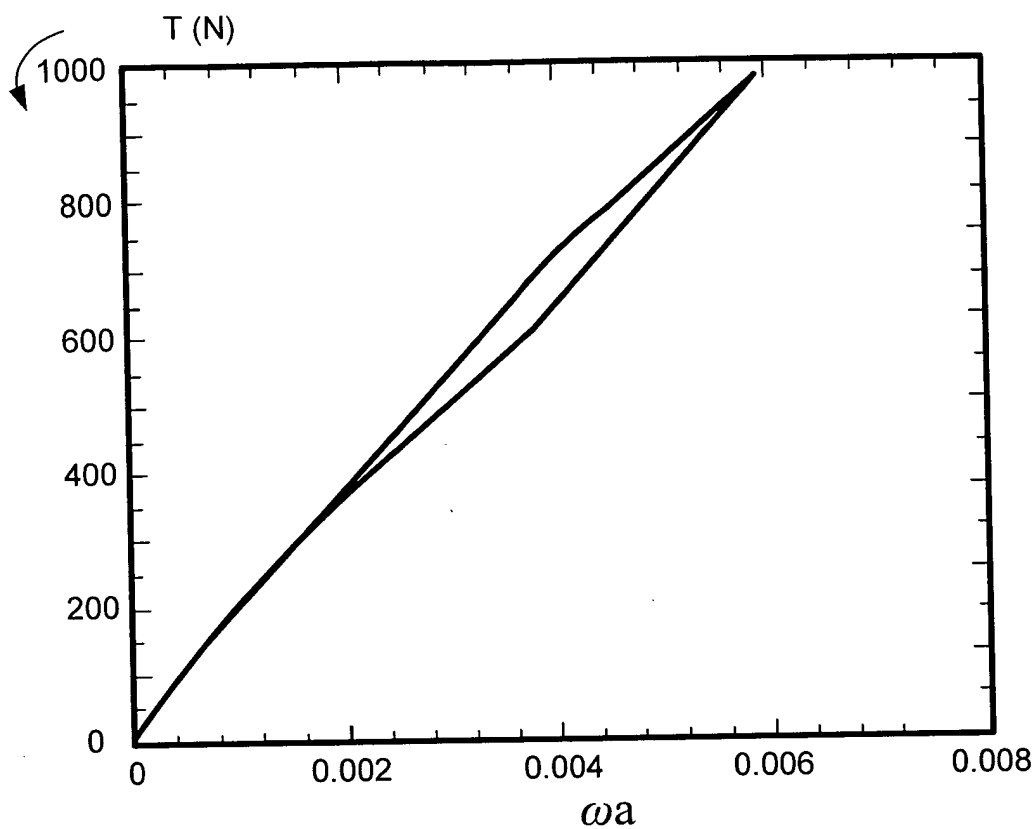


FIG. 36A

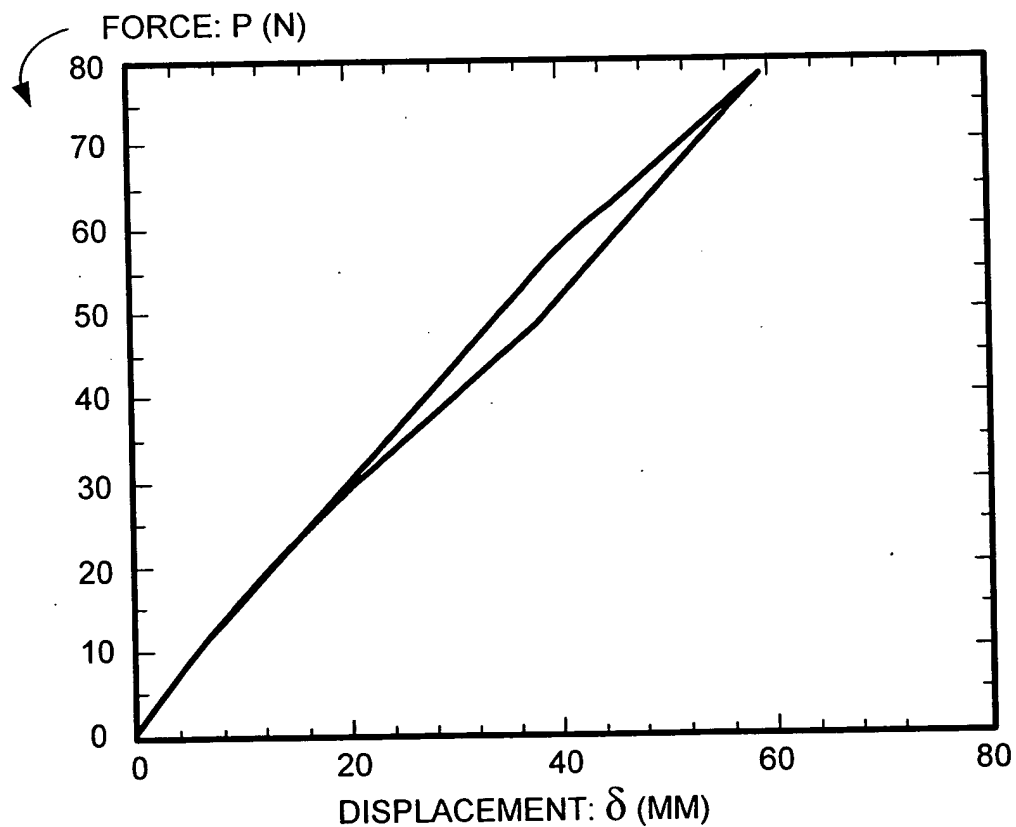


FIG. 36B

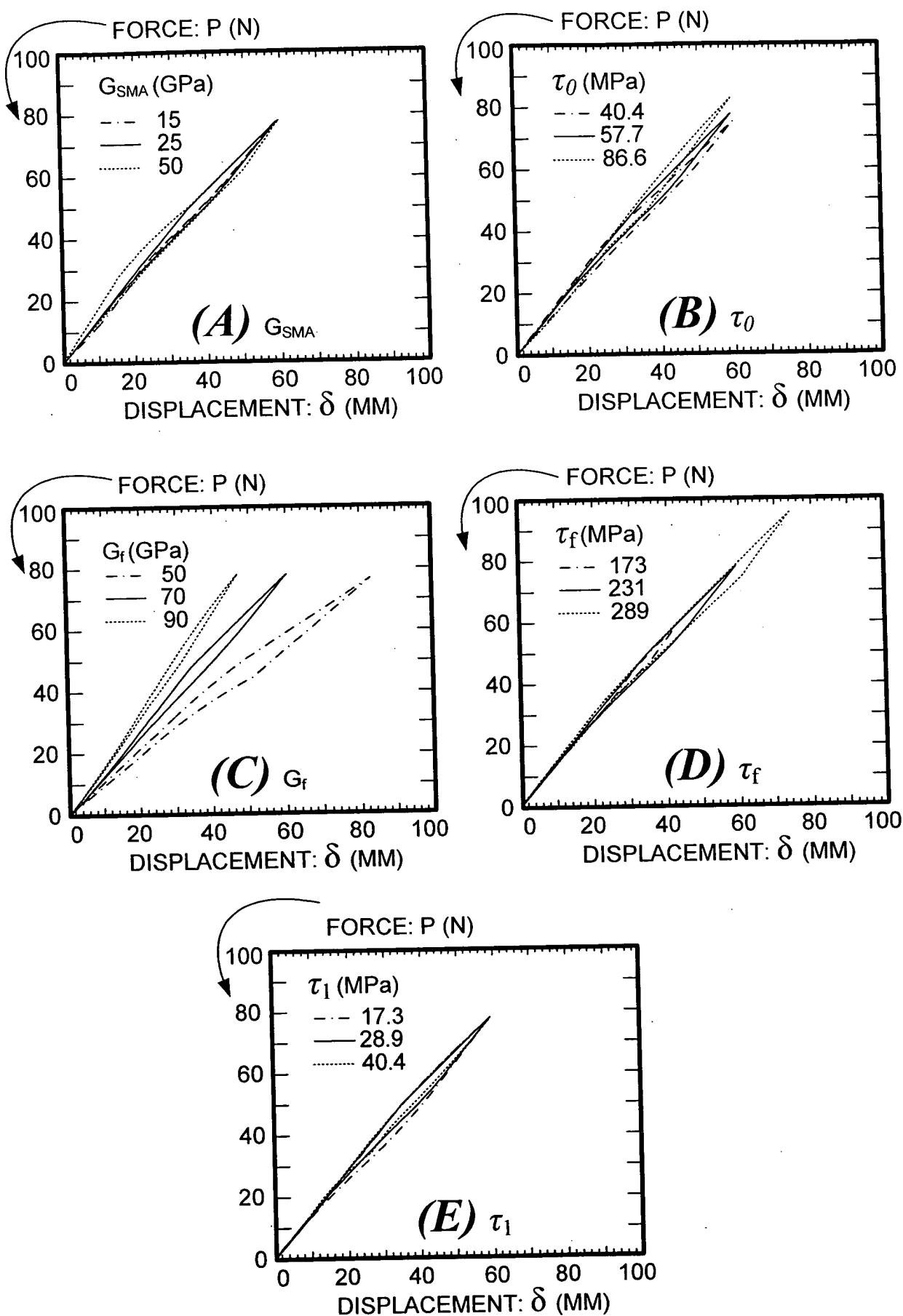


FIG. 37

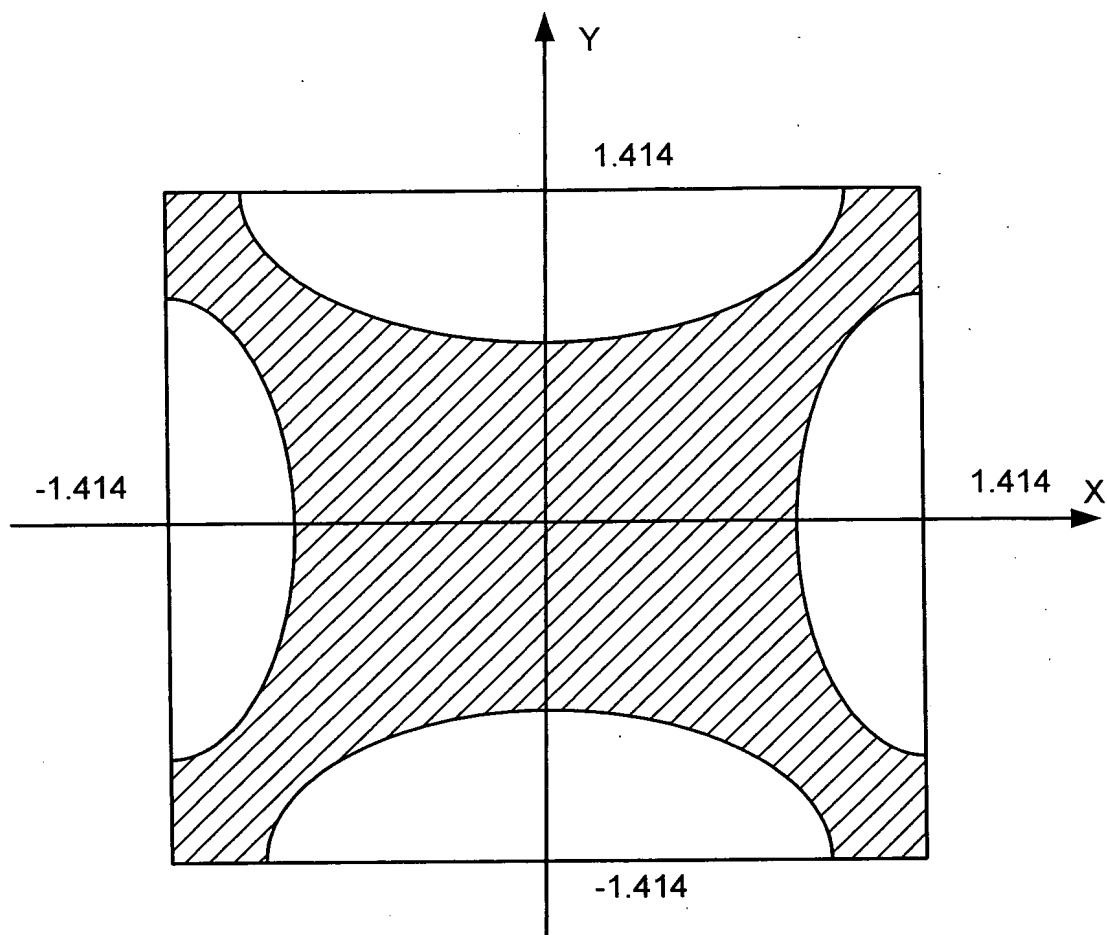


FIG. 38

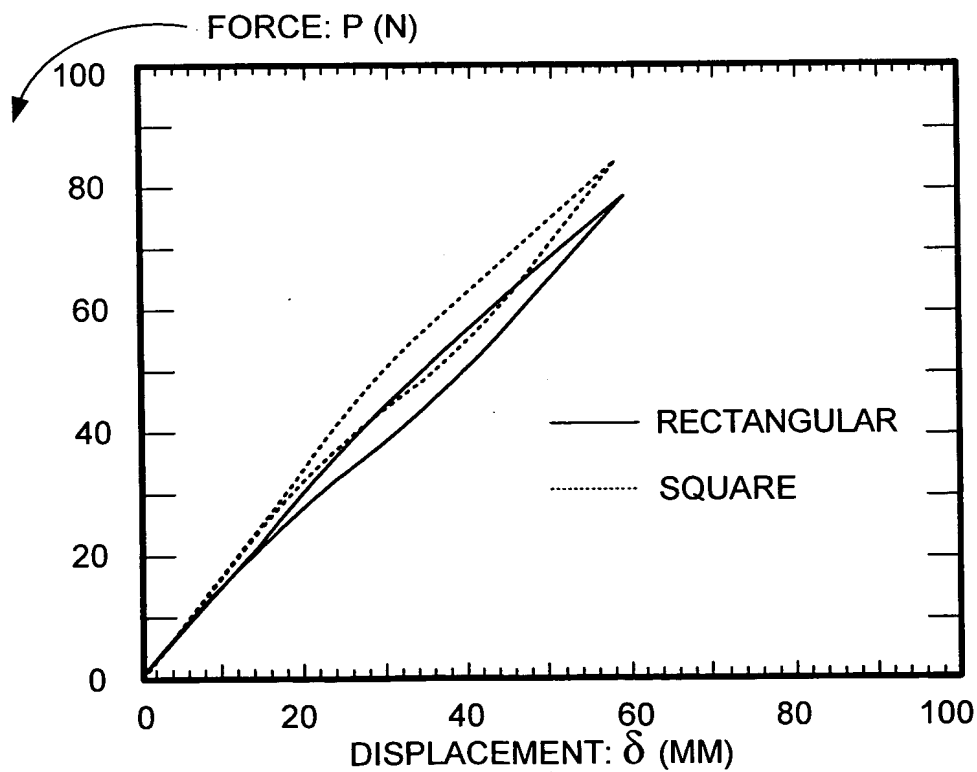


FIG. 39

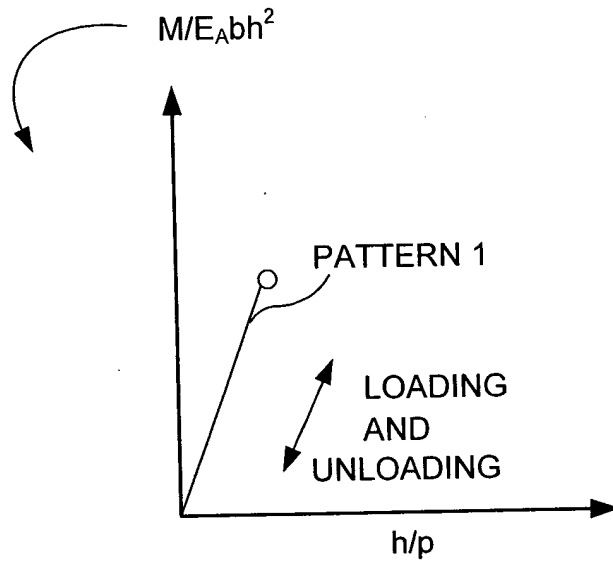


FIG. 40A

FIG. 40B

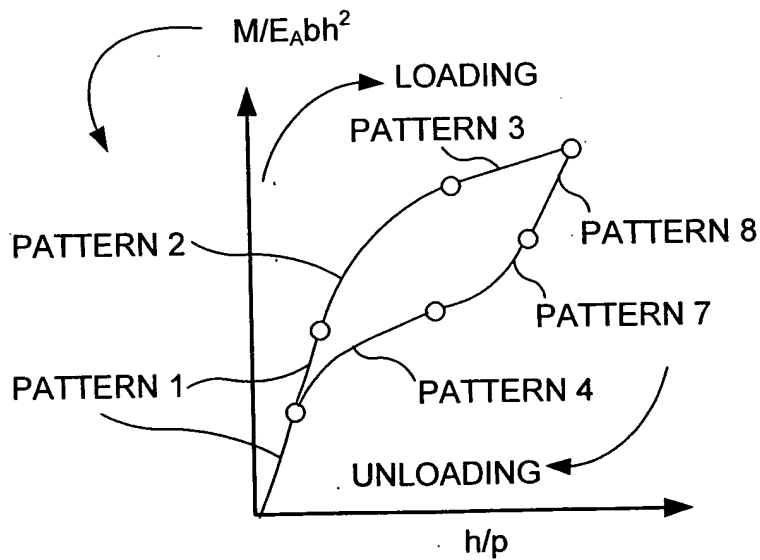
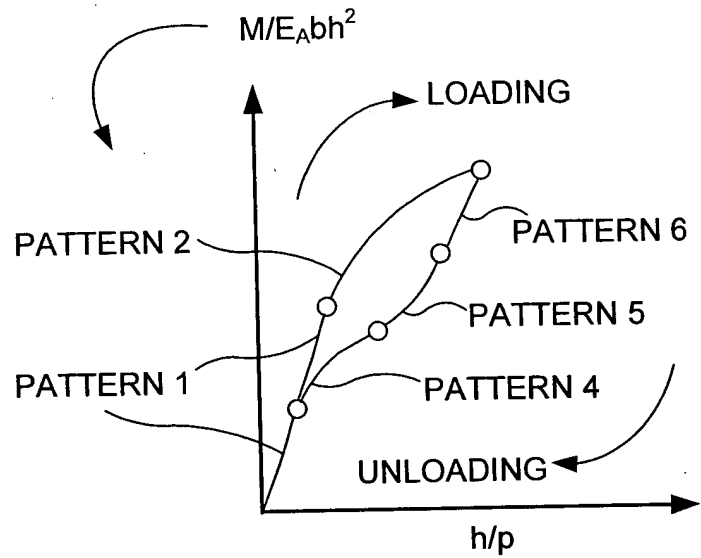


FIG. 40C

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